

COLLEGE PARK

UNIVERSITY OF MARYLAND
ALUMNI MAGAZINE

VOL. 2, NO. 2
SPRING 1991
\$3.00



EIGHT INVENTIONS THAT
ARE CHANGING YOUR LIFE

COLLEGE



8

EIGHT COLLEGE PARK INVENTIONS THAT ARE CHANGING YOUR LIFE — OR SOON WILL

by Lisa O'Rourke

The insight and ingenuity of College Park faculty members are producing devices, techniques and innovations that have practical benefits for all of us. Here are some stories of how campus researchers take on vexing scientific problems — and, in their solutions, find new opportunities to improve our lives.



17

THE ADVENTURES (YES, ADVENTURES) OF AN ART GALLERY DIRECTOR

by Gwendolyn Owens

You may think the job of running an art museum is boring, but the author paints a very different picture.

DEPARTMENTS

3 PERSPECTIVE *by William E. Kirwan*

4 FIRST WORD *by Steve M. Barkin*

6 NEW AND OBSERVED Faculty accomplishments, a benchmark for sponsored research and a look at where our students come from

30 PORTFOLIO The manifold artistic contributions of faculty members are featured

32 EXPLORATIONS Campus researchers are probing the secrets of paralysis, altering the aroma of fish oil and predicting future crop yields

34 IN BOUNDS Staying in the swim, a Hall of Fame honor, and renovations at Byrd Stadium

35 ASPIRATIONS Colonnade Society: A new and distinctive campus initiative

36 ALUMNI NEWS Class notes, chapter news, alumni profiles and travel

40 CALENDAR A guide to university happenings in the months ahead

48 IMPRESSIONS The tools of another era display the skill and artistry of our ancestors

PARK



20

REMEMBERING 1965...

by Lisa Gregory

It was the year College Park inducted its first group of Phi Beta Kappa honorees. More than 25 years later, several look back at a campus and a society on the brink of change.

25

BOOMER

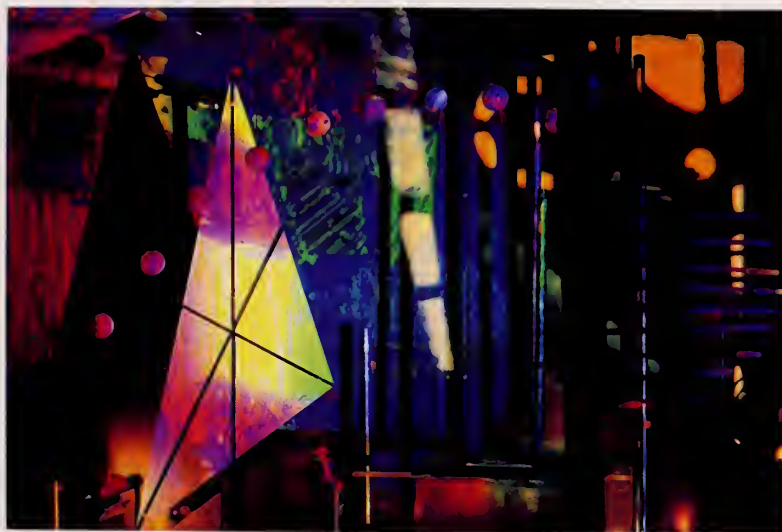
by Marc Katz

The All-Pro quarterback is defined by his abiding loyalties: to old friends and worthy causes, to mentors and his alma mater.

14

PHYSICS IS FUN

by Fariss Samarrai
Professor Richard Berg makes physics fascinating for students of all ages.





Coming this Spring ...

A Great New Reference to more than 140,000 College Park Alumni ...

The University of Maryland at College Park Alumni Directory!

The University of Maryland at College Park Alumni Association is proud to announce the upcoming publication of our very first university-wide Alumni Directory.

The new 1991 Directory will be the single most comprehensive reference available on over 140,000 distinguished College Park alums, and an excellent resource for career networking, planning social events, and looking up long-lost friends.

Your Participation is Important!

The Directory won't be complete

without you! So be certain to update and return your biographical information in the alumni questionnaire mailing coming your way soon.

If you wish to reserve a personal copy of this landmark volume, just return the Reservation Form included in your mailing along with your questionnaire form.

Don't miss this opportunity to be accurately included in the first-ever 1991 University of Maryland at College Park Alumni Directory!



The Budget Crisis and the Prospects for Continued Enhancement

By Dr. William E. Kirwan
President, University of Maryland
at College Park

This is the best of times. This is the worst of times. Within the past several years our university has taken enormous strides toward becoming one of the top public institutions in the nation:

- We have been named the flagship campus of a newly decentralized state system of higher education.
- The average SAT score of our entering freshman class has moved from 970 to just below 1100 in less than a decade.
- Our campus has become more culturally diverse, more open to women and minorities, and more international than almost any other university in the nation.
- The volume and quality of our research programs and grants is rapidly increasing, from \$35 million to more than \$100 million annually in just five years, making College Park a leading national research center.
- We have begun a major program to enhance the quality of our undergraduate education, through smaller classes, more tutorials and counseling, an enriched honors program, a revamped curriculum and other initiatives.

But this is also the worst of times. Just as we were getting into high gear on our program of enhancement, budgetary cutbacks have forced us to drastically slow the pace of many vital improvements. The combined cuts that we have suffered since last September total about \$25 million. This represents a 10 percent reduction of state support for our base budget since July 1, 1990.

These cuts already have placed a terrible

**Your encouragement,
your support, your
involvement and your
activity on behalf of
your Alma Mater can
make the difference.**



burden on our capacities for teaching, research, and service to the state. Contract personnel have been terminated, vacant positions have been frozen, important searches have been suspended and operating budgets have been decimated. Worse still, these are not one-time cuts. Instead, we must develop a budget for FY 1992 that will have to be nearly \$25 million and 91 positions less than the budget with which we began the current fiscal year.

The challenge we now face is to prevent our weakened financial position from reversing the progress we have made in recent years. Although we will have to scale back the scope of our plans and reduce some areas of activity, we can, if we use our resources wisely, retain some of our gains and continue to make advances in areas of highest priority.

Success in facing this challenge will require extraordinary effort and support on the part of the entire community, and especially from you, our alumni. Success also will require us to make some very difficult decisions—decisions on which we cannot expect always to achieve consensus. However, the objective is one we all support—continued improvement of our university.

When I assumed the position of president about two years ago, I never dreamed that in

so short a time I would have to write a message such as this. Then, the talk was of budgetary enhancement for College Park. Nevertheless, if we use this period of decline in the state's economy with courage and intelligence, if we clarify and focus our priorities, we can continue to make progress and be in an even better position to advance the institution when the economy turns around, as it surely will.

We are a vital and vibrant community, with every reason to be proud of our university. I ask that, despite the current budget problems, we hold on to our vision for College Park. We still aim to become a model academic enterprise, a university that is known and admired nationally and internationally for the quality of its programs, students, faculty, staff and alumni. We still aim to become a showplace for the talents of the citizens of the state. And, above all, we still aim to become the pride of Maryland.

For all these reasons, in these best and worst of times, we need you now more than ever before. Your encouragement, your support, your involvement and your activity on behalf of your Alma Mater can make the difference. With your help, we cannot only survive the current crisis, but prevail over it, and realize our shared vision for College Park.



What do movie actress Dianne Wiest (whose credits include "Parenthood," "Edward Scissorhands" and "Hannah and Her Sisters"), television personality Mark McEwen (he does the weather and much more on "CBS This Morning"), and former New York Yankee slugger Charlie Keller

(he played in the major leagues for 13 years and in four World Series) have in common? The answer is that some of you were their classmates at the University of Maryland at College Park.

We have more than 160,000 alumni, so it probably goes without saying that thousands of College Park alumni have made important contributions in every field of endeavor. That itself may be a problem—too often it goes without saying. Every day, UMCP alumni make their marks in artist's studios, hospitals, classrooms, laboratories, legislatures, Broadway theaters, board rooms, on playing fields, at home and through service in countless communities.

If we've learned one thing in producing *College Park* magazine, it's that our university has fascinating alumni—to name two, Sandra Zimmerman, the administrator of the Potomac Massage Training Institute and a member of College Park's first group of Phi Beta Kappa graduates, and Norman Julius Esiason, the quarterback of the Cincinnati Bengals. Both of them are profiled in this issue.

From our readers' letters, we know that you're eager to become reacquainted with the campus, to catch up with your classmates and to learn more about our graduates.

You can help make that possible by letting us know what you're doing and where you are, in case we've lost track. Send us some information about yourself for the Class Notes section of the magazine. This section has proved to be one of the most popular—so popular, in fact, that beginning with the next issue of *College Park*, only notes about Alumni Association members will appear.

The university wants to keep in touch with you, and your fellow alumni are interested in what you've been doing since you left the campus. And if along the way you've won a Pulitzer Prize or led a team to the Super Bowl, that's all right, too.

—Steve M. Barkin
Editor



COLLEGE PARK

Leonard R. Raley
Publisher and Assistant Vice President for Institutional Advancement
Loren R. Taylor
Director of Alumni Programs

EDITORIAL STAFF

Steve M. Barkin
Editor

Roz Hiebert
Senior Editor and Director of Public Information

STAFF WRITERS

Brian Busek
Linda Freeman
Lisa Gregory
Tom Otwell
Fariss Samarrai

Gary Stephenson
Toni Guagenti
Kimberly Neumann
Susie Powell
Editorial Assistants

DESIGN STAFF

Judith Bair
Director of Creative Services

Margaret A. Hall
Art Director

John T. Consoli
Photo Editor

Maria A. Sese
Art Director, Alumni News
Stephen Darrou
Christopher Paul
Design and Production
Peter Zulkarnain
Production Intern

William E. Kirwan
President, University of Maryland at College Park
Kathryn Costello
Vice President, Office of Institutional Advancement

ALUMNI ASSOCIATION

Executive Council

Dr. Evelyn Pasteur Valentine
President

William D. Godwin
President-Elect

Dr. Virginia Norton
Senior Vice President

James Shaw
Immediate Past President

Dr. Ray Anderson
Lisa A. Caroglianian
Milton M. Mulitz
Clayton Powell
Dale Singer
Vice Presidents
Loren Taylor
Secretary-Treasurer

College Park Magazine is published by the Office of Institutional Advancement for dues-paying members of the College Park Alumni Association and all donors. Letters to the editor are welcomed. Send correspondence to Steve M. Barkin, Editor, Office of Institutional Advancement, University of Maryland, Turner Building, Second Floor, College Park, MD 20742.

The University of Maryland at College Park is an equal opportunity institution with respect to both education and employment. The university's policies, programs, and activities are in conformance with pertinent federal and state laws and regulations on non-discrimination regarding race, color, religion, age, national origin, political affiliation, sex, and handicap.



Roger H. Davidson will co-edit the multi-volume Congressional encyclopedia.

Famed Editor Joins Faculty of College of Journalism

Eugene L. Roberts, Jr., former executive editor of *The Philadelphia Inquirer*, will join the College of Journalism faculty at College Park beginning in the Fall 1991 semester. One of the country's most honored and respected editors, Roberts led *The Inquirer* newsroom to 17 Pulitzer Prizes, including the 1990 Gold Medal for Public Service. Roberts announced his retirement as the paper's executive editor and as president of Philadelphia Newspapers Inc., publisher of *The Philadelphia Inquirer* and the *Philadelphia Daily News*, in July 1990.

A member of the College of Journalism's Board of Visitors since it was established in 1983 and chair of the National Advisory Board of the school's Knight Center for Specialized Journalism, Roberts will be a full-time tenured professor. He will teach classes in reporting, editing, ethics and the practice of journalism, and will aid the school in developing an international journalism program. Roberts will also serve as a senior editor for the *Washington Journalism Review*, the national, 30,000-circulation media magazine owned by the College of Journalism.

Roberts graduated with a journalism degree from the University of North Carolina at Chapel Hill and was a Nieman Fellow at Harvard University in 1961-62. He was city editor of the *Detroit Free Press* and southern correspondent, Vietnam war correspondent and national editor at *The New York Times* before joining the *Inquirer* in 1972. He served as the 1990 chairman of the Pulitzer Prize Board for awards in journalism, arts and letters.

Professor Named Co-Editor of Congressional Encyclopedia

Roger H. Davidson, professor of government and politics, has been named co-editor of a massive compilation of scholarly work about the U.S. Congress.

Davidson joined the faculty full-time in 1987 after six years as an adjunct professor. He and two co-editors are at work on *The Encyclopedia of the United States Congress*, a four-volume reference work on the country's national legislative history, its members, structure and policy-making.

Publication of the multi-volume work is planned for late 1993 by Simon and Schuster's Academic Reference Division.

Davidson represents the political science discipline on the project.

His co-editors are Morton Keller, Spector Professor of History at Brandeis University, and Donald C. Bacon, a veteran Washington

journalist and biographer. They are assisted by an editorial board of 19 other prominent scholars and journalists.

Planned as the definitive reference work of its kind, the encyclopedia will contain about 1,500 signed original articles contributed by leading academics, journalists, elected officials and Congressional staff members. The articles will cover a variety of topics ranging from art and architecture in the Capitol to the concept of representation and the role of the media.

Davidson has served on several House and Senate committee staffs and was senior research specialist for the Congressional Research Service of the Library of Congress. He has authored or co-authored more than 120 works on legislatures and policy-making, including *Congress and Its Members* (3rd ed., 1990), the leading text on the subject.

Research Awards Top \$56 Million During First Half of Fiscal Year 1991

Research contracts and grants administered by College Park for the first half of FY 1991 topped \$56 million. This represented a significant increase over the same period of the previous fiscal year, according to Victor Medina, director of the Office of Research Administration and Advancement.

In fiscal year 1990, total contracts and grants topped \$100 million for the first time.

According to a report released in January by Medina's office, more than 1,000 grants and contracts were awarded during the first half of FY 1991, for a total of \$56 million. The federal government provides most of the research money to College Park, with more than 35 departments

and agencies accounting for nearly 64 percent of the funding awarded to the university.

The National Science Foundation was the largest single federal sponsor, awarding a total of \$5.3 million. The National Aeronautics and Space Administration was the next largest federal research sponsor, awarding grants and contracts for more than \$5.2 million. Department of Defense agencies followed with \$4.3 million.

Rounding out the top group were the U.S. Department of Agriculture with \$2.9 million, the Department of Energy with \$2.4 million, Health and Human Services with \$2.2 million, and the Agency for International Development with \$2 million.

State of Maryland departments such as education, transportation and natural resources provided some \$3.5 million.

Private contributors such as corporations, foundations, institutes, societies and associations provided an additional \$5.6 million. Other sources of funds, such as local government, other universities, and consortia provided \$11 million.

The College of Computer, Mathematical and Physical Sciences received the largest share of research dollars with a total of more than \$13 million. Rounding out the top five College Park recipients were the College of Engineering (\$10.5 million); Education (\$4.2 million); Life Sciences (\$4.4 million), and Agriculture (\$4.4 million).

College Park Wins USAID Funding For Economic Reform Center

The University of Maryland at College Park has been selected by the U.S. Agency for International Development to start a center devoted to improving the small business climate in Eastern Europe and the developing world.

The new Institutional Reform and the Informal Sector (IRIS) Center received \$8.9 million, the first installment of what is expected to be a \$25 million, five-year grant, late last fall during ceremonies on Capitol Hill.

USAID officials said College Park was selected from a field of more than a dozen academic institutions and think tanks in large part because of the prominence of Mancur Olson, Distinguished Professor of Economics and a leading authority in the field known as "The New Institutional Economics." Olson is the project's principal investigator.

The IRIS center will send teams of lawyers, economists and other experts abroad to help nations revise laws and regulations that inhibit economic growth.

The center and its staff will support groups and individuals targeting specific reforms in developing countries, and fund research, both at the university and elsewhere. Planned, for example, is a major conference in Prague, Czechoslovakia on economic issues related to the transition to a market economy in eastern Europe, work on specific reforms in several south Asian countries, and assistance to reformers in Mongolia.

President William E. Kirwan said the center is an example of how College Park is "moving aggressively to meet our international responsibilities and promote our overseas opportunities."

College Park Faculty Ranks 2nd in Nation in Fulbright Grants

Eleven faculty members at College Park have received faculty Fulbright awards in the 1990-1991 competition, more than all other universities in the nation with the exception of the University of Washington. The scholarships provide funds to lecture, consult or conduct research abroad.

More than 3,400 scholars from public and private universities applied this year, and 963 were selected.

The UMCP professors who received awards (with their disciplines and geographic areas of study) are: J. Scott Angle, agriculture (United Kingdom); Philip Burke, education (Germany); Erve Chambers, anthropology and archaeology (Thailand); Richard Claude, government and politics (Philippines); Richard Cross, American literature (Germany); Hasia Diner, American studies (Israel); James Gilbert, American history (The Netherlands); Kenneth G. Smith, business administration (Ireland); Elbert B. Smith, American history (Soviet Union); Robert L. Vann, architecture (Turkey); and Ronald M. Weiner, biological sciences (Peru).



Where Do Our Students Come From?

The following figures, showing the geographic origin of College Park's 34,837 students in the Fall 1990 semester, are reprinted from *Institutional Studies*, a publication of UMCP's Office of Institutional Studies. Maryland residents are listed by county, other U.S. residents by state, foreign residents by country. The geographic origin, in this study, is taken to be a student's place of residence at the time he or she applied for admission to the university.

UNDERGRADUATE	NUMBER	PERCENT
Montgomery County	7,428	28.9
Prince George's County	5,011	19.5
New York	1,497	5.8
Anne Arundel County	1,449	5.6
New Jersey	1,445	5.6
Baltimore County	1,274	5.0
Howard County	1,166	4.5
Pennsylvania	897	3.5
Baltimore City	556	2.2
Virginia	500	1.9
Charles County	336	1.3
Harford County	306	1.2
Frederick County	278	1.1
District of Columbia	245	1.0
Florida	204	0.8
Connecticut	165	0.6
Other Maryland	1,038	4.0
Other U.S.	1,036	4.0
Other countries		
India	60	0.2
Iran	54	0.2
West Germany	46	0.2
South Korea	44	0.2
China	41	0.2
Others	593	2.3
Totals		
Maryland	18,842	73.4
Other U.S.	5,989	23.3
Other countries	838	3.3
Unknown	2	0.0
TOTAL UNDERGRADUATE	25,671	100.0

Program Links Japanese Firms, Engineering Students

A program for engineering students has been initiated at College Park to help facilitate their entry into the global marketplace. Eventually, J-TAP, the Maryland/Japan Technological Affairs Program, is expected to involve 20 students each year including internships with Japanese corporations.

Modeled after a program offered at

MIT, the College Park program is designed to make it easier for engineering students to participate in educational programs in Japan. Last summer, three students attended an intensive course in Japanese at Cornell University. The course was the equivalent of Japanese I; the students are taking Japanese II this year at College Park.



EIGHT INVENTIONS THAT ARE CHANGING YOUR LIFE

(OR SOON WILL)



Knowledge can be found at any university. But the kind of inspiration required to take that knowledge and fashion it into new tools for society is not as readily harnessed.

At the University of Maryland at College Park, researchers in every scientific field have been inspired to create devices, compounds and techniques that have affected, or soon will affect, many of us. According to university statistics, UMCP faculty and staff conduct more than \$100 million worth of research projects a year.

The university got serious about the invention process in 1986 with the creation of the Office of Technology Liaison. Under the direction of Wayne Swann, a former inventor, the OTL helps researchers patent or otherwise safeguard rights to inventions. The OTL also moves discoveries from the academic realm to the commercial marketplace by obtaining funding to back inventors, marketing the invention and licensing it to interested companies.

The OTL now receives an average of one new invention a week; through licensing agreements, the office has successfully transferred about 25 percent of these to the commercial marketplace. Matching technological concepts with interested companies and negotiating the licensing agreement can take months, or it can take years, says Swann.

Here are some recent fruits of the knowledge and inspiration of College Park faculty members, inventions and innovations that span the spectrum of scientific endeavor and of human needs.

***O! for a Muse
of fire that
would ascend
the brightest
heaven of
invention...***

*Henry V, William
Shakespeare*



By Lisa O'Rourke

PHOTOGRAPHY BY JOHN T. CONSOLI



Noise cancels noise; microwaves enhance surgery and wind tests save gas . . .

ONE

NOISE CANCELLATION DEVICE



The helicopter pilot, the patient in an organ-scanning machine, and the nine-to-fiver working next to a loud machine all have something in common: noise.

A repetitive, drumming-into-the-brains sound. A loud, so-they-can't-think kind of sound.

The eradication of that kind of noise became the goal of Steven Tretter, an associate professor in the electrical engineering department, and the company that backed his work, Noise Cancellation Technologies Inc., of Linthicum, Md. Tretter developed a computer program for a new device that "cancels" a repetitive noise in a given environment.

The irony of Tretter's invention is that it uses noise to cancel noise. The device uses microphones to pick up the repetitive noise in an environment. The noise is translated into a signal that is sent to a computer. The computer then calculates a new signal that is the auditory equivalent of a "mirror image" to the incoming signal. That new signal is sent to a set of speakers, which translate it into sound waves broadcast into the environment.

The net effect of two equal but opposite vibrations on the human eardrum is a lack of sound—blessed silence.

Tretter didn't develop the device's relatively simple hardware; instead, he created the algorithm, or problem-solving mathematical program run by the computer which measures the incoming signal and creates its opposite.

The possible applications of the device, which is about the size of a portable radio or large toaster, are almost limitless. It can be used "anywhere with a periodic, drumming sound of a motor...such as a pilot in a helicopter would hear, the wind noise in heating vents," he says.

In addition, certain magnetic resonance imaging machines, devices that scan soft tissues, produce a noise that annoys patients. Tretter says they could wear a headset attached to the noise cancellation device.

One advantage of the device is its selectivity: it won't cancel out human voices. "Not to be insulting," he says, "but your voice is a random noise, a random signal. The device only works with repetitive signals."

The university has filed for a patent for the noise cancellation device. NCT, the company that sought help from the university to develop the device, recently signed an exclusive agreement with the university to manufacture it.

TWO

MICROWAVE SCALPEL



You hope you'll never have a reason to have liver or spleen surgery. But if you do, you may have reason to be grateful to Dr. Leonard Taylor.

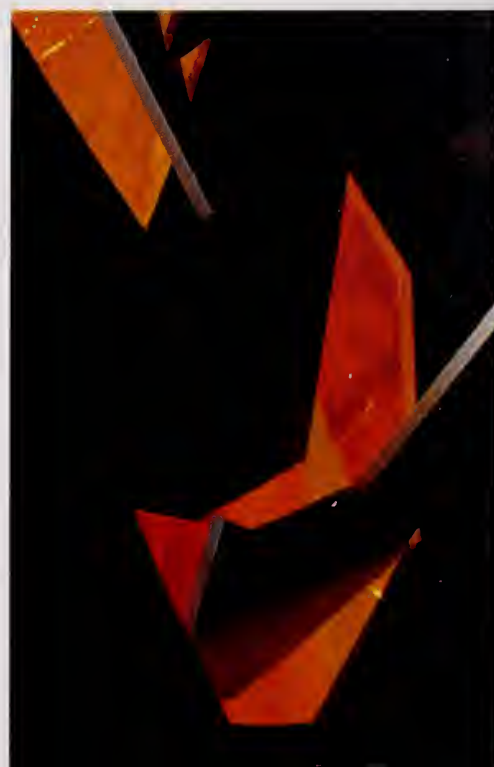
Taylor, a professor in the electrical engineering department, has taken the technology that gives us instant burritos and put it to work in a life-saving device: a microwave surgical scalpel.

"The liver and the spleen are large organs with spongy areas containing a large network of small vessels that seep blood," explains Dr. Taylor, who also has a joint appointment in the university's medical school in Baltimore.

Surgery on either organ is a risky procedure. "Patients die on the operating table because surgeons are unable to stop the bleeding," says Taylor. Conventional vessel-cauterization techniques do not penetrate deeply enough to effectively seal shut the spongy mass.

The concept of Taylor's invention is relatively simple. Inside the ordinary blade of a scalpel, he placed a microwave antenna. Power from a specially designed microwave generator is fed to the blade through a cable in the scalpel handle. When the surgeon slices into the tissue, Taylor says, the heat generated by the microwaves sears or coagulates the tissue to a depth of 3 millimeters on either side of the blade, effectively cauterizing the intricate web of blood vessels. Bleeding is controlled so the surgeon can remove the diseased tissue.

When Taylor began working on his invention about nine years ago, a physician at the University of Maryland Department of Surgery, Dr. William Reed, tested the device on animals and then on volunteer patients. Eighteen patients from three hospitals have been operated on with the device so far, and Taylor says the surgeons have been very pleased with the results.



THREE

WIND TUNNEL TESTING



It's a room full of air—not even hot air. It's not an invention or even an innovation. But the University of Maryland's Glenn L.

Martin Wind Tunnel is the breezy testing ground for many of the inventions and innovations we use in the great outdoors.

Engineers from the aerospace engineering department, which operates the wind tunnel, have whipped up gusts for over 1,300 tests since the tunnel was built in 1949. Usually, models of the item being tested are used, but if the object is small enough, engineers will test the real thing, says Jewel Barlow, the tunnel's director. A system of computers and sensors measures and calculates air flow.

Jet fighter planes, radio antennae, automobiles, unusual building designs, and even birds in the flesh or in miniature have encountered winds of up to 230 mph in the tunnel.

The tunnel's most famous client is the Ford Taurus, a popular car developed specifically for minimum wind resistance to improve fuel economy.

The models for the car's prototypes—Barlow says that Ford designers started with three or four built to $\frac{3}{8}$ ths of the actual size—were made primarily of clay. Barlow explains that what's tested is not the strength of a material in wind, but features such as wind resistance, air flow or amount of air pressure at certain points on a given design.

Taurus models were made of clay, he says, because it could easily be remolded for the dozens of geometric changes made to the design over 400-plus hours of testing to determine the 1986 design. The models endured winds of 100-120 mph. "But the calculations allow us to predict the resistance at any speed," says Barlow.

More massive modes of transport have also been tested. Barlow says engineers have tested airflow patterns over the Navy's aircraft carriers, such as the U.S.S. Kennedy—using models, of course—in the tunnel because rescue helicopters operating near the carrier's tower, or superstructure, were getting caught in some strange air currents. Air currents can be visualized with smoke or fluorescent oil, Barlow says.

The wind tunnel has benefited those who prefer to stay at home as well: it was the test site for Tandy Corp.'s backyard receivers for satellite TV customers. "We put the actual device in...and just turn [the wind] up to see when it's going to come apart," says Barlow. The company tested three designs over about two weeks to find one that could withstand winds up to 80 mph.

The tunnel also offers lessons in avian aerodynamics. The Patuxent River Wildlife Research Center used the tunnel to test radio transmitters strapped to migratory birds to track their routes. The center's researchers wanted to make sure the size, shape and weight of the transmitters would not unduly slow down or impede the birds' flight.

The model for the project? "Frozen carcasses of birds the Fish and Wildlife Service confiscated from illegal kills," says Barlow. Never a dull moment at Maryland's wind tunnel.



FOUR

BOVINE VACCINE



Hold out your arm...just don't look at the needle...wince, and...there! Now that wasn't so bad, was it?

For generations, vaccines have been part of American childhood. But they're also a staple of the health regimen for America's livestock.

Now Dr. Siba Samal, an assistant professor at the College of Veterinary Medicine, has applied biotechnology techniques to the production of a new vaccine for that barnyard favorite, the cow.

Samal recently developed a vaccine against bovine respiratory syncytial (pronounced sin-sish-al) virus. "This virus is the number one cause of respiratory disease in beef and dairy cattle in the United States" and a major problem worldwide, says Samal.

The virus is especially dangerous to calves, just as its cousin, human respiratory syncytial virus, is a major cause of respiratory disease in children. No effective traditional vaccine existed for either the bovine or human versions of the disease.

About three years ago, Dr. Samal began to look for the portion of the virus' genetic material that triggers an immune reaction in cattle. The virus itself is quite unstable, says Samal, making it difficult to produce a traditional vaccine, which typically uses a denatured or killed version of the virus.

But, he says, techniques of genetic engineering "allowed us to use the stable portion of the viral gene." Samal then cloned multiple copies of this piece of gene, which are inserted into a harmless virus.

The cow's immune system responds to this viral genetic material by producing antibodies to it, antibodies that will then react if the cow is exposed to the real thing.

Samal has applied for a patent for his vaccine and has signed a marketing agreement with Upjohn Co., a major pharmaceutical firm, to test and manufacture the vaccine.

Human infants may soon be getting a similar shot in the arm. Because no vaccine exists for the human version of this disease, the National Institutes of Health has watched Samal's work with interest and is now trying the same approach with human respiratory syncytial virus.

IMPROVED RUBBER



Joseph Silverman, a professor in the Materials and Nuclear Engineering Department, couldn't believe how much the U.S. Army spent to outfit its tank tracks with rubber pads in the early 1980s.

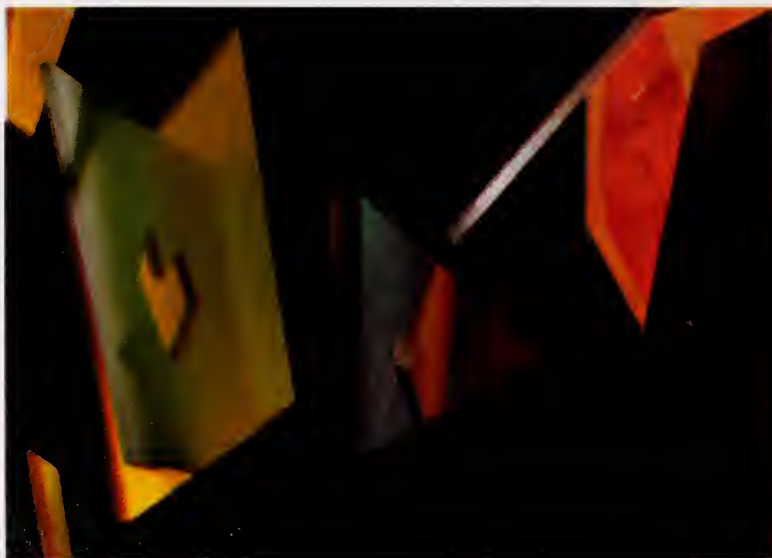
Most tank tracks, the continuous belts that roll around the wheels, are made of steel. But NATO tanks have rubber tracks so they won't tear up the roads of Europe. The type of synthetic rubber used—one "cured" with sulphur—is popular, but wears out quickly.

"To my astonishment, the cost is \$15 to \$25 per mile," Silverman says. As head of the university's Radiation and Polymer Sciences Laboratory, he approached the Army in 1983 with a proposal to improve rubber by processing it with ionizing radiation instead of a sulphur bath. The Army responded with a \$400,000 grant.

Sulphur-cured rubber is attacked by ozone, causing it to stiffen and crack. Silverman's rubber withstood laboratory tests in an ozone chamber at the Army's Fort Belvoir for 32 days. Regular rubber fails in five days. And since then, he says, "tests at the National Institute for Science and Technology have been run with eight times the normal ozone concentration, and the rubber has lasted at least 100 days."

Silverman's rubber costs about 15 percent more to make than sulphur-cured rubber, but the process is very efficient and requires only low energy. And the stuff that keeps the Army rolling may also ease the lives of civilians in the form of windshield wipers, weather stripping for windows and doors, escalator belts, and some solid tires.

The university has patented the rubber and is looking for a company to manufacture it for civilian and military uses. For its initial investment, the U.S. government can use the technology without paying royalty fees.



SOFTWARE EVALUATOR



Ever wonder why a computer has to emit an irritating beep when you, the hapless user, have done something wrong? Or do you wish you could make sure a software program was compatible with your brain before you bought it?

And did you ever think that a psychologist would solve these problems?

Well, one has. Kent Norman, an associate professor in the psychology department, is an expert in the application of cognitive psychology—the study of human thought processes—to the "interface" between humans and computers. To make that interface a little easier, he and Ben Shneiderman, a professor in the computer science department, developed an instrument to help software manufacturers and prospective software buyers determine how "user-friendly" a piece of software is.

"The problem in the past was that when people evaluated interactive computer systems, they made up their own questionnaires to do so," Norman says. So manufacturers couldn't be sure they had covered all the bases; they couldn't compare the results across brands; and they couldn't even be sure that the questionnaires measured what they wanted.

A few years ago, the National Science Foundation awarded a grant to Norman and Shneiderman to create a standardized evaluation. The two developed QUIS, the "Questionnaire for User Interaction Satisfaction," which comes in a paper-and-pencil survey version and a computer disk version.

So now one computer program can be used to evaluate another—with input from users, of course. Both consumers shopping for new software and software design companies can use the program, says Norman. The questionnaire contains a manageable 21 questions that explore everything from the user's general reaction to the readability of screens.

"It can be applied to word processing, programming languages, bibliography programs, operating programs like DOS," Norman says, "and to Macintosh and IBM."

And to Hewlett Packard, which purchased a worldwide license to use QUIS to detect weak points in its product line before it hits the stores. The university's Office of Technology Liaison has licensed QUIS to several other companies as well.

**From improved tank tracks
to natural super glue,
discoveries save money
and open new doors.**

SEVEN

MARINE ADHESIVE



Scientific research often presents opportunities for strange bursts of human ingenuity. This is certainly true for Ron Weiner, a professor in the Department of Microbiology. While everyone else is still trying to master the use of Crazy Glue, Weiner has discovered a bacterial biochemical that could be used as a new type of marine adhesive.

In the early 1980s, Ron Weiner and a colleague were studying the maturation process of oysters in marine research tanks in Lewes, Del. In this process, free-swimming oyster larvae cement themselves to a layer of old oyster shells on the bay bottom, called "cultch"; then they metamorphose into shelled adults called "spat."

During the study, the researchers isolated a new species of brown-pigmented bacterium on the cultch in the tank. They gave the bacterium the unofficial moniker LST, for Lewes Spat Tank.

Weiner found that when LST colonizes cultch, it doesn't just sit there. The bacterium forms a sticky film to help anchor itself to the cultch. It is, in essence, stuck by its own goop.

Analyzing the substance, Weiner found it was a unique carbohydrate that he named "polysaccharide adhesive viscous exopolymer," or PAVE.

While he was testing PAVE, he ran into a tedious little problem with basic laboratory clean-up. "All the time I was cultivating these microbial films," he says, "I realized LST couldn't be scraped off a surface once it was glued on."

Then it hit him: PAVE made a great glue. He found that PAVE worked particularly well as a glue on wood, some types of steel, and brass. And, of course, it didn't disintegrate in water. Weiner thinks PAVE could be used as a commercial marine adhesive, and even used in products as diverse as medical sutures.

The university has patented PAVE, and a Maryland-based company, Adheron Corp., was formed in 1987 to produce and sell PAVE products. Weiner, who serves as a consultant to the new firm, and his colleagues are developing ways to produce PAVE in large quantities.

EIGHT

NATURAL ANTIBIOTICS



Sometimes good science is a matter of serendipitous connections: A scientist will put together information and techniques that have been hidden away in dusty libraries.

That's what happened to Dr. Norman Hansen, a professor of chemistry and biochemistry. Hansen was looking for a natural alternative to nitrite, a food preservative that has been linked to health problems. Once he had figured out how nitrite's molecular structure determined its activity, Hansen thought he could find a compound in nature with a similar structure and properties.

Searching the scientific literature, Hansen says, "I stumbled on nisin...it had the features we wanted, behaved as we wanted."

Nisin is a natural antibiotic called a "bacteriocin": a small, protein-like substance produced by one bacterium to kill other bacteria. It has been in our food supply since antiquity, Hansen says, because one of the key bacteria in the cheese-making process produces it.

In his search, Hansen also dug up information on subtilin, a compound almost identical to nisin that had never been used by humans.

Hansen realized that nisin and subtilin were "gene-encoded" compounds; that is, the bacteria's genes carried the blueprint for the production and structure of the two compounds. He figured that those genes could be bio-engineered to make new versions of the compounds.

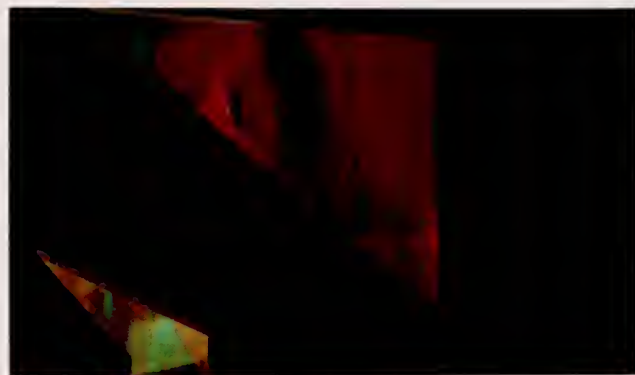
With genetic engineering techniques, says Hansen, the gene can be mutated in a controlled fashion. The altered gene is inserted into laboratory bacteria, which then "express" that gene, producing the desired compound in large quantities.

Hansen says altered nisin probably could be used to preserve meats and canned vegetables. It may also double as a potent antiseptic in mouthwash, toothpaste and hand cleaners.

Compared with traditional antibiotics and food preservatives, the new compounds will be more stable, more soluble in food and liquid, and more effective against a wider spectrum of bacterial contaminants.

"The thing that makes me proudest of this achievement," says Hansen, "is that the idea was in the literature for 15 years—but no one had realized its significance."

Hansen's achievement, like those of his UMCP colleagues, springs from such new realizations, such sparks of invention. And those insights promise benefits for all of us.



Lisa O'Rourke is a free-lance writer and a graduate student in the College of Journalism.

> P · H · Y · S · I · C · S <

IS PHUN

Richard E. Berg has a basement full of toys. About 1,200 of them. All are experiments in physics, designed to illustrate and popularize the science and make it approachable to students of all ages, children and adults, anyone trying to understand the physical world. After all, says Berg, "Physics is fun."

Berg is supervisor of the Teaching Support Service in the Department of Physics. Since 1982, he has run the popular "Physics is Phun" lecture/demonstration program at the university. This free event, provided to the public in three-night programs four times a year, has the physical power to draw 500 people per night to the Physics Department lecture halls whenever there is a demonstration by Berg.

The "Physics is Phun" program began as a potpourri of odd physics demonstrations used by Berg to illustrate physics principles during road shows to local elementary schools. "We realized we had a good thing," he says. "The shows were very popular with the kids, so we decided to open the program on campus to the public." Berg's first "Physics is Phun" demon-

STORY BY FARISS SAMURAI





physics
is
phun



stration drew 250 to 300 viewers. Friends told friends about the wonderful way Berg explained physics, and the program grew. Berg expanded his demonstration subjects and added an extra night for each program theme.

"We have people standing in the aisles now," he says. And the audience includes a variety of people—families, kids and their grandparents, professors, and more. Often, local teachers arrive looking for new ways to explain science.

As his audience has grown, Berg has expanded his inventory of demonstrations. Today, his 1,200 experiments cover such topics of physics as sound, light, electricity, energy and motion. Berg has even presented a program on illusions, complete with a headless woman.

Despite statistics that show science knowledge is declining in the United States, Berg says his demonstrations are popular because people are actually very interested in science. "I try to spark people's interest in physics," he says. "I try to make it fun and entertaining. Science doesn't have to be dull. I hope some of our younger people will pursue greater scientific knowledge because of what they see in our demonstrations."

At one of his programs, "The Physics IQ Test," Berg makes sure that his audience has a chance to participate in the experiments by guessing what effects will be the result of an action. The test consists of 25 counter-intuitive questions that the audience is asked to answer. Berg then demonstrates each experiment, and people have a chance to see how the physical world really works. "Science makes you think," he says.

Before each program, Berg and his staff open the lecture halls early and allow visitors to play with some of Berg's toys. It's a warmup for the show to follow.

"I get a lot of help from our students in setting up the experiments and running the program," he says. "We motivate everybody with a pizza party."

Berg believes that a child-like curiosity about the physical world should stay with people throughout their lives. It was Berg's own children who started him thinking about ways to demonstrate physics principles in an interesting way. "They would ask me, 'Daddy, why is this?' and 'How is that?' and I would say, 'It's physics.' I developed a whole program to answer questions about lightning, eclipses, rainbows,



you name it." Berg eventually added demonstrations to explain even the more complex questions of radiation and nuclear energy, relativity and quantum effects. And he has explained much of it with items as simple as cartoons.

Berg also is responsible for supplying technical support to other physics lecturers on campus. Among his demonstrations are about 200 movies, videodiscs and videotapes, audio cassettes and disks, and several thousand slides. During a typical week during a semester, he and his staff provide more than 200 demonstrations for other professors' classes.

Berg began his career as a music major at Manchester College with plans to someday become a high school band director. He had taken several physics and math courses along the way and he eventually went to graduate school in

physics at Michigan State University. He earned his Ph.D in 1966, then came to the University of Maryland. In 1982 he combined his loves of physics and music in his textbook, *The Physics of Sound*, published by Prentice-Hall.

Berg plays the piano and clarinet, and Renaissance and baroque instruments—the harpsichord, recorders, shawms, the viol. He is a member of the University of Maryland Collegium Musicum.

Last year Berg's unit purchased a new "Physics is Phun" road show van in order to take more demonstrations to area schools. "The van is helping us increase the service aspect of the university to the community," he says. "I give a large number of talks and demonstrations to students in area schools and I've led workshops for area science teachers. We're helping people see how the laws of physics apply to everyday life."

The
(yes, exciting)
Exciting
Adventures
of an
Art Gallery
Director

By Gwendolyn Owens

Baltimore-Washington Airport, 4 p.m. I'm standing in line to buy a round-trip ticket to Los Angeles on the 5 p.m. flight, returning on the 11 p.m. flight out of L.A. No luggage. No toothbrush. I'm wearing my killer red suit (at

Advice from The Author:

Don't wear anything casual to work,
always carry a toothbrush and
keep your mouth shut about what's
in The Gap Bag.

least I thought to bring my knitting). In the next 12 hours, I will arrive in the dead of night in California, take a cab to an office that looks like the set for "L.A. Law," uncrate a painting (using my trusty Swiss army knife), return to the airport, and get on the plane with the painting wrapped inside a plastic bag from The Gap. All in a day's work.

No, I'm not Sam Spade. I'm the director of The Art Gallery, the professionally accredited museum of the University of Maryland at College Park. When I was studying art history in college, I told friends that I did not want to work in a museum because I thought it would be boring. All those hours staring at paintings. Although I have stared at art all day perhaps three or four times since I began working in museums 15 years ago, and although the day-

to-day life of a gallery director is a fairly predictable routine involving the

mechanics of putting on exhibitions, there are times when I have felt as if I had entered a Dashiell Hammett novel. Or worse.

There was the time the collector said I arrived on the wrong Saturday and then spent most of the next two hours telling me about the double-barreled shotgun he keeps to protect the collection. Yes, I assured him, I did believe he had the courage to use it. In London, a colleague and I entered an art dealer's gallery where, when we gave our names, we were whisked away to a secluded upstairs room. The dealer whispered that he was expecting us and knew of our mission. What mission, we wondered, while getting nervous that Scotland Yard or "The Avengers" were on their way. Later, after hearing a long and twisted tale, we pieced together the details which revealed that the art dealer and a recently deceased donor to our university jointly owned an art collection. The dealer assumed that we were already negotiating to buy the paintings as a memorial, and that we were visiting London to secure the sale of the dealer's share. For us, the trick was putting the puzzle together while not revealing our absolute ignorance, which would have made the university (it was not Maryland) and ourselves look completely stupid.

In short, one never knows what may happen. A chance visit (or visitor) may have momentous impact. I rarely wear anything casual to work because that is the way to guarantee that someone important will stop by or that I will have to go somewhere; not long ago I broke my own guideline, and on that particular day, when I dared to wear my linen slacks, two impeccably dressed museum directors



stopped by. Never again.

Another rule (which I try never to break) is never to travel with works of art in a car without a companion, in case there is an emergency. At dusk, just outside New York City one December, my rental car, full of priceless art, had a flat tire; I watched the cargo while my colleague changed the tire. Despite the high value of the art we carried, I was calmer than when I was driving more mundane objects through an ice storm or the time I changed a tire alone in the Berkshire mountains, having just delivered my cargo of art.

When traveling alone by air, the rule is to keep your mouth shut about what is in The Gap bag, the cardboard box or the oddly shaped suitcase. On one occasion, when I faced the prospect of escorting a fat cardboard tube full of Frank Lloyd Wright drawings (I had already bought them a seat on the plane), at the last minute, I persuaded the collector to trust an art shipper to transport the drawings by more conventional means. This was a great relief, as changing planes in Pittsburgh with a heavy tube 4 feet long was going to be difficult to accomplish without attracting attention.

So, why do things happen in this strange fashion? Collectors have their own particular ideas, and if you want to borrow the object or, as in the case of the man with the shotgun, just see it, you have to be sensitive to their whims. If they say "come Saturday," you come on Saturday, never mind that you wanted to come on Tuesday. After all, you are inconveniencing them with your request to see or to borrow the object. Many collectors are simply very private people. Friends have stories about meeting collectors in secret locations where they would know their contact only by the red boutonniere. Or tales of having to tear up (but mercifully not ingest) directions to a meeting point.

My life is richer for those encounters.

Then, of course, there are the extraordinary situations. The painting that I brought back to College Park from California on the overnight flight (still in my killer red suit) had been "lost" for years, and I was sent to retrieve it before it disappeared again. Was I being watched? I wasn't sure. Dennis Barrie, director of the Contemporary Arts Center in Cincinnati, might have gone to jail had



the Mapplethorpe obscenity judgment been for the prosecution, not the defense. To be a museum director, you have to accept that sometimes you will have some strange responsibilities.

There are many more stories. And there are some things I can never tell. I have been trusted with secrets about where art is and sometimes by what bizarre means it came into the hands of its present owner. Most museum professionals are honorable people (unlike your typical gumshoe) and have no intention of violating the trust given to them.

Now and then I wonder what would have happened if a professor had not pushed me to take a museum internship. Perhaps I would be the smart trial lawyer I expected to become. But, then again, I would have missed the good adventures: meeting incredible people who let me into their homes and their lives. My life is

richer for those encounters. Add to that the delight of finding striking works of art, sometimes after several years of detective work, and finally a day of possibly arduous travel to uncover it, and this becomes a worthwhile profession. Even if the gallery visitors never know just what distances—literal and figurative—we have to go to make an exhibition happen.



Gwendolyn Owens, a native of Baltimore, has served as director of The Art Gallery on campus since 1988. She holds an undergraduate degree from Tufts University in fine arts and a M.A. in art history from Williams College. This article originally appeared in *The Faculty Voice*, an independent faculty newspaper at UMCP.

The Art Gallery of the University of Maryland at College Park serves the university community and the region through a program of challenging exhibitions and public programs. Founded in 1966, the gallery was moved from the Taues Fine Arts Building to its present location in the Art-Sociology Building in 1977. The Art Gallery presents five to eight exhibitions each year. For information about the gallery, call 405-2763.

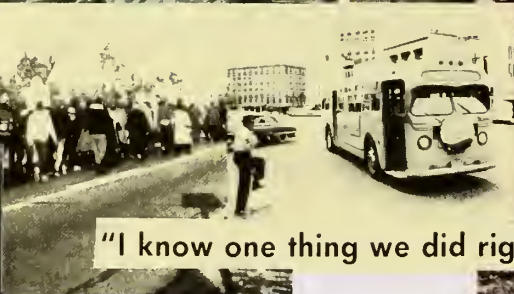
A "window" opens for art donations. See page 31.

ILLUSTRATED BY JOHN T. CONSOLI

It was the year College Park inducted its first group of Phi Beta Kappa honorees. More than 25



Was the do
Keep you



"I know one thing we did right



Hold on, I

25 years later, several of them look back at a campus and a society on the brink of change.



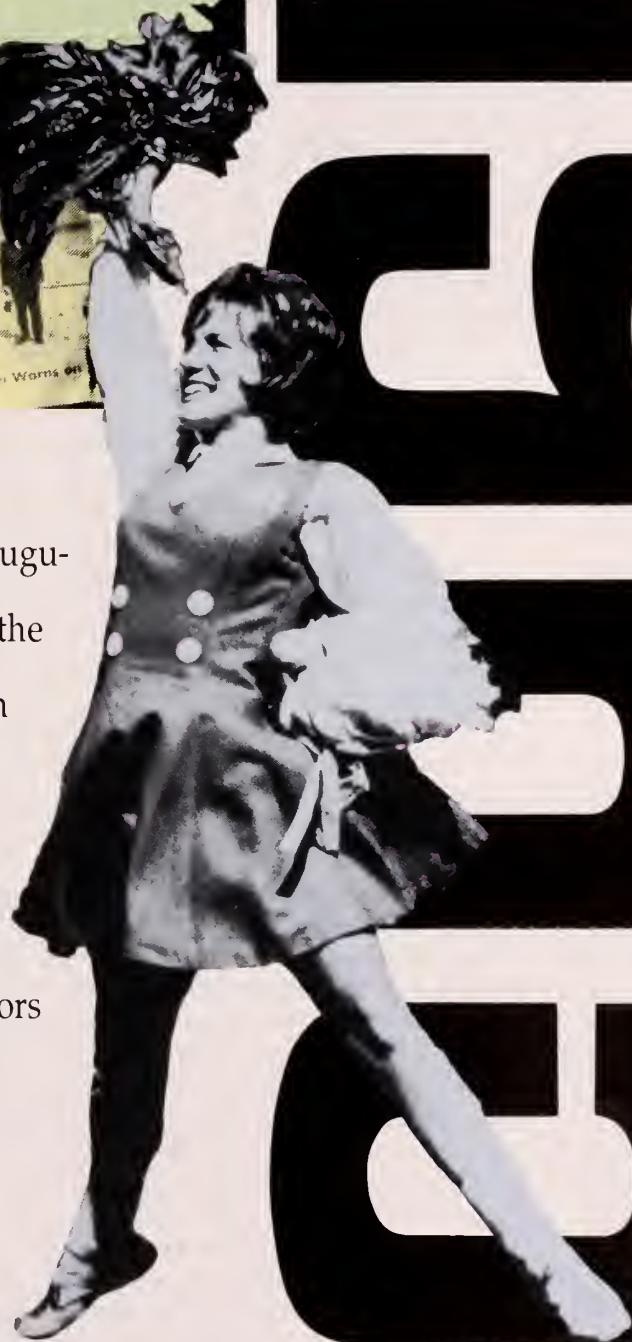
ve started to fight.
es on the prize,

d on."

Remembering

The year was 1965.

Lyndon B. Johnson was inaugurated as the 36th president of the United States, Black Muslim leader Malcolm X was shot in New York, Martin Luther King led a procession of 4,000 civil rights demonstrators from Selma to Montgomery, Ala., North Vietnamese aircraft shot down U.S. jets, and students demonstrated in Washington against the U.S. bombing of North Vietnam.



By Lisa Gregory

In the spring of that same year, 44 students at the University of Maryland at College Park were inducted for the first time in campus history into the honorary society of Phi Beta Kappa.

It was a wet, lush, green spring with so much rain that the student newspaper, *The Diamondback*, remarked that further rain would require the construction of an ark.

And it was also the calm before the storm, as one former Phi Beta Kappa inductee described it. For the most part, life on the College Park campus had not yet been touched by the social upheaval that would define the remaining years of the '60s.

Recently, several of the inductees of the university's first class of Phi Beta Kappa took time to look back at their years at College Park and to reflect on the course that their lives had taken.

"We were really straight kids," recalls Linda Hobbs Stacy. "We weren't really part of the hippie and drug culture."

But the changes to come were there in small, subtle ways.

William Tamblyn did participate in an anti-war demonstration—one of the university's first such demonstrations.

"I found out about it by reading the student newspaper," recalls Tamblyn, a self-described "intellectual deviant" who went through a variety of majors before finally graduating with a degree in philosophy.

He joined four Quakers in front of McKeldin Library, a participant in a silent vigil.

"I stood with them, walked with them," recalls Tamblyn. "But, of course, I didn't speak to them. Because it was a silent vigil, I never really found out who they were."

Tamblyn is now an investor in New Jersey.

When he recalls his days at the university, he speaks fondly of long, involved discussions of religion and politics in the dining room of Cumberland Hall.

"We discussed all those big things people are supposed to think about as undergraduates.



NEARY, MARY DOROTHY—Wheaton; English—AΛΔ; Dorm Ex ΦΚΦ.

CONTAGIOUS mental state and

HOBBS, LINDA—Cat

That was neat," he says.

Tamblyn, who earned his doctorate in 1984 from Temple University, would go on to confront life's elusive questions and share his insatiable curiosity about the human spirit with students as a teacher at both Temple University and Antioch University in Philadelphia, where he taught such courses as Introduction to Humanistic Psychology.

Now no longer teaching, he is writing a book, with a working title of "Paths of Growth and Harmony: Rethinking the Interpersonal and Social Aspects of Our Pursuit of Happiness."

He doubts that today's generation of college students spend much time discussing religion and politics in the dining halls of dorms.

"From what I see of undergraduates today, they are very different," he says. "I think you would hear more talk of finance and careers and less talk of philosophical issues."

While Tamblyn recalls dining hall discussion with affection and appreciation, Linda Hobbs Stacy remembers time spent in the library.

"There are the little things that stick out in your memory," she says of her years at College Park. "I remember discovering a book on Indians or reading poetry. I spent a lot of time in the library because my dorm was so far away."

Stacy, who now lives on 20 acres in Arizona where she trains and boards horses, did a lot of reading about Indians—reading that would come in handy when she went on to study anthropology as a graduate student at the University of Arizona. She majored in English at

College Park only because there was no major in anthropology then.

When she wasn't in the library or in class, she was hiking with the university's Trail Club and thinking that someday she would be a professional archaeologist.

Life didn't turn out that way. But Stacy, who met her husband through the Trail Club and remains in touch with many former Trail Club members from as far away as Oregon, Washington and Pennsylvania, has no regrets.

"I'm so lucky," says Stacy, who now has a college-age son of her own. "I've got a wonderful life."

Sandra Ann Zimmerman understands that life does not always go as planned. But, then again, she was never one to plan her future.

"I've had a rather erratic career," says Zimmerman, who is currently the administrator of the Potomac Massage Training Institute in Washington, D.C.

When she first came to the university, she considered being a veterinarian, then a doctor. But working for a veterinarian changed her mind on the first, and working in a hospital one summer discouraged her from the second.

As a major in zoology, though, she was interested in genetics, behavior and evolution, as opposed to microbiology.

"I didn't like working with microscopes," says Zimmerman.

She recalls fondly a special research project the spring semester of her senior year that required her to crawl out of her warm bed

Remembering

1969



Council; Dean's List, EMANIA complicated cords bolster the pound

Catonsville; English - Trail Club; WRA Intramurals; Dorm, jud. board.

before sunrise and set out upon her journey—to record the mating call of the prairie warbler.

"It was then that I discovered how wonderful it was to be outdoors that early in the morning," says Zimmerman, who is a member of such environmental groups as Greenpeace and Environmental Action.

From her undergraduate years on, there has been one constant in her life—education—says Zimmerman, a native of Bethesda, Md. She received her Master of Arts in Teaching degree at Harvard University. She has educated people in the more traditional sense as a high school teacher and even as a tutor in Santiago, Chile, and in the non-traditional sense, as well.

During the last 25 years, her career has included work as executive director of the Society for Occupational and Environmental Health, as a consumer representative and consultant to the Food and Drug Administration and as director of communication for the Insurance Institute for Highway Safety—positions that involved educating the public on such matters as the safety of air bags in automobiles and the importance of child restraint laws.

With her work at the Massage Training Institute, she hopes to heal, as well as educate.

"There is a strong movement in this country now in personal control over health with exercise, stress reduction and nutrition. We in Western civilization have gotten out of touch with our bodies. We've gotten out of touch with our-

selves and with nature. Now we're returning. Coming full circle," says Zimmerman.

Mary Neary Dudley's two teen-age daughters are amazed at her stories of dormitory life on the College Park campus, she says.

Dudley, who received a degree in English from the university, is now a child development consultant and coordinator of parents' education for Lovelace Health Plan Pediatrics in Albuquerque, N.M.

"It's hard for my daughters to believe," she says, "but people came into our rooms to check whether or not we dusted. My own mother didn't even do that. So, I felt like I was being treated with less respect than at home."

Dudley, who spent only a year in the dorm before returning home, was also annoyed by the dorm's strict curfew hours and the fact that young women were not allowed to wear slacks outside the dorm, except during very cold days.

But there were lighter moments, as well. She remembers one night in her dorm being

academic program, though I wasn't one of his own students. I never even took a physics class," she says.

She describes Toll as one of the first people she met in her life as a young person who seemed to be "totally immersed in his work and seemed to really enjoy it. And if he didn't, he certainly did a good job at pretending he did."

During her years as a student assistant in the physics and astronomy building, she recalls afternoon tea every day at 4 p.m., when faculty and students mingled and munched on cookies that she had purchased.

"I was always impressed with how poorly teachers ate," she recalls now with a soft laugh. "They always wanted what was worst for them, like chocolate marshmallow cookies. They were very smart in some ways, but nutrition was not high in their minds."

Dudley, like the other Phi Beta Kappa inductees, was not directly touched by the social unrest that was sweeping the country, but like

'We were really straight kids,

we weren't really part of the hippie and drug culture.'

awakened by the mooing of a frightened cow, sneaked onto an elevator and sent to the top floor.

Most of her memories, though, concern her job as a student assistant in the physics and astronomy department, where she worked with future university president John Toll, then the head of the department.

"I was always aware that he followed my

Tamblyn has small, but lasting memories of the change that was to come.

"During my senior year, through a Catholic organization we were beginning to have dialogues between black university students, I think at Howard University, and white students. It was just beginning to happen. I remember participating in that."

She also remembers a visit by activist Dick Gregory.

"I remember him saying that anything anyone does to foster justice in the world is part of the solution," she says.

And like so many other college students of her generation, she had been devastated by the assassination of President John F. Kennedy in 1963.

'...Anything anyone does to foster justice in the world is part of the solution.'

"The assassination certainly did burst a lot of illusions," says Dudley, who would go on after her years at College Park to earn a master's degree in English at the State University of New York and a master's and Ph.D. in psychological foundations of education at the University of New Mexico.

Lawrence A. "Tommy" Dorsey Jr. can still vividly recall where he was the day he heard that Kennedy had been shot—sitting in his Government and Politics 101 class.

"It was a very difficult thing to accept," says Dorsey, a state's attorney in Frederick County, Md., who received his law degree from the University of Virginia School of Law.

Dorsey had taken Kennedy's advice—ask not what your country can do for you, but what you can do for your country—to heart.

A native of a small town where he had graduated first in his high school class of 51 students, Dorsey knew early on that he wanted to become a lawyer and that he wanted to help people. It was a family tradition, this reaching out to others.

His father was the mayor of Woodsboro, the town of less than 500 where Dorsey grew up and lives still. His mother was heavily involved in

church work, while his sister was principal of a nearby school for mentally disabled children.

And he was a bit intimidated by the large campus he encountered as a freshman. But he took great comfort and enjoyment in life in Bel Air Hall—a newly constructed dormitory on campus.

He had the same room, Room 202, all four years of college. And when he wasn't studying and pursuing his dream to be a lawyer, he was cultivating friendships and becoming more and more involved with dorm life.

"We were somewhat of a fraternity in our dorm even though we weren't Greeks," remembers Dorsey.

Bel Air Dormitory was selected as the university's outstanding dorm during Dorsey's four years there. And he served as dorm presi-

dent his junior year and president of Cambridge Complex his senior year.

"We developed some close relationships," he says of the dormitory community. "We were a rather active and close dorm."

Dorsey also remembers passing the poultry coops on campus as he walked to class. Those same chicken coops were eventually replaced by the computer science center.

Looking back, Dorsey feels that he was heavily influenced by the era.

He remains active in his own community, much as his parents did before him. He is a past president of the United Way of Frederick County, director of the Woodsboro Medical Center, past secretary of the Woodsboro Fire Company and Sunday School teacher at the Woodsboro Lutheran Church. And he remembers the feeling of being involved from his early days as a college student. He is also the current president of the Maryland State's Attorneys' Association and a member of the board of directors of the National District Attorneys' Association.

"There was this feeling of being of service to other people, of helping one another," he says. "We still believed in the idea that you shouldn't ask what your country can do for you, but what you could do for your country."

And the storm was gathering.



DORSEY, LAWRENCE A.,—Woodsboro; Government & Politics—ΦΗΣ; Young Democrat Political Science Club; Pre-Low Club; Dorm, pres., sec'y.; Distinguished Scholarship Cert; OΔK.

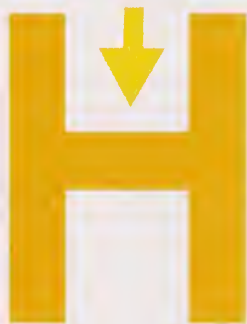


BOMBER

**Tough and outspoken,
the All-Pro quarterback
remains loyal to his
alma mater**



By Marc Katz



e has been to the Super Bowl and Pro Bowl, been named All-Pro and Most Valuable Player in the National Football League.

These are the honors that rest beside Norman Julius "Boomer" Esiason's name.

His Maryland T-shirt rests next to his heart.

"I'm extremely, extremely proud to be an alumnus of that school," says Esiason, the Cincinnati Bengals' left-handed quarterback. "I still wear my Maryland colors proudly. I'll wear a Maryland hat on TV, a Maryland sweatshirt on TV. I donate money to the school. I donate tickets to kids. I do it because I like it."

On fall and winter Sunday afternoons, Esiason projects a different image in the NFL. A tough guy who can argue with his coach, a man who is not afraid to say what he's thinking.

He speaks his mind on such disparate causes as better working conditions for NFL players and cancer research.

The public might remember him better for believing so fervently in the 1987 NFL players' strike that he sat in front of a bus transporting scab players into the stadium.

On the more human side, the East Islip, Long Island, native's mother Irene died from cancer when he was five—his two sisters and father reared him—and he has been fiercely committed to the cause of cancer research, and other worthy causes, ever since.

Loyalty is burned into his moral code so deeply he often comes off as a latter-day Will Rogers. A man he doesn't like? Okay, the opposing linebacker.

His first college coach, Jerry Claiborne, didn't play him for two years, yet Esiason credits the man for helping him toward his goal.

His father, Norman Sr.—a great man in Boomer's eyes—routinely is a guest at home, and even road, Bengals games. The buddies Boomer had in high school and college are his buddies today—part of his extended family.

He believes what he says, and does what he believes. Charity? Boomer gives of wallet and time. Friendships? Boomer made them and kept them.

He rejoiced last season when the Terrapins pushed over .500 for the first time since 1985, beating highly ranked Virginia in the final regular-season game to earn an Independence Bowl bid. He has made it a point to stay in touch, and the many lean years, since he has been away, have been tough.

"When you're on a [pro] football team, everyone comes from a different school," Esiason said. "So every Saturday, the night before a game, we have a meeting and everyone's talking. ...Clemson won its game, UCLA won that game, Michigan won that game. Maryland lost to Wake Forest. It's kind of disappointing because I know the resources are there for that not to happen.

"I really like Maryland."

Easy stuff to say now, when life is good, and success is a touchdown pass away. It wasn't so easy back then, when only Maryland wanted him for football.

He wasn't recruited by Notre Dame, USC, Penn State, Ohio State and Michigan. He was recruited by Maryland and then-coach Jerry Claiborne. As an afterthought.

He didn't play in a varsity football game for two years, and when he did play, as a sophomore redshirt, the Maryland Terrapins did not do well.

The winnowing process from grade school to high school to college to the pros almost missed Esiason. He was a three-sport star at a small high school, playing basketball and baseball as well as football. His baseball prowess as a pitcher and hitter was such that he won the Carl Yastrzemski Award as the best player on Long Island as a senior, and could have gone to St. John's University to play baseball with a couple of other pitchers who have done well since—John Franco and Frank Viola.

Oddly, Esiason was recruited off the basketball floor. Maryland football assistant Tommy Groom was watching a recruit on the other team. Esiason was outplaying the guy.

"They might have had films on me or something," Esiason said, "but I really believe they had 25-26 scholarships and they

had already given 25. They decided let's do this guy a favor on Long Island."

Who did whom the favor? Esiason took the scholarship even after getting sick on his recruiting visit. He stayed in his room the whole weekend. When he began his first semester, he didn't do well. He didn't do well at anything for a long time.

"I was very unhappy my first two years," Esiason said. "It wasn't because of the school. I never felt I had the opportunity to play.

"There were guys recruited after me as quarterbacks who were told I wasn't going to be there because I was getting married and I was going to leave because I was unhappy. It looked like it was going to be an insurmountable mountain to climb."

Esiason's grades suffered, even though he had been a good student in high school. He had always tied his academics to his athletics. If things were going well on the field, they were fine in the classroom.

On the field at Maryland, Esiason didn't play varsity for two years.

"My grades, when I was first at Maryland and wasn't playing, were horrendous," Esiason said. "I had to get reinstated. When I was playing, I took care of everything. When I wasn't playing, I was in the tank.

"I was feeling sorry for myself. I'll be the first to admit, if I had it to do all over again, I'd have a better start. I made it all the way through. I had to go to summer school and redo everything. And I paid the price for slacking off, and I'm going to tell you, it makes you a better person. The tougher times are, and the tougher times are for you to deal with, the better you are as a person.

"It's like growing up without a mother, it's like playing hurt, it's like putting yourself behind the eight ball and coming through. I don't ever feel sorry for people. Nothing was ever given to me. You always had to do it the right way. There were no short cuts.

"Something clicked in me. I don't remember what it was. Whatever that driving force that filled me at Maryland, it was always in me. It's always taken time to mature."

Then, as now, Linda Cavani worked in the Maryland football office. Then, as now, Cavani was in and out of cancer remission. When Esiason was feeling low, Cavani told him to wise up. In the middle of last football season, when Esiason was having a bad time of it with the Bengals, she wrote him a letter telling him he didn't have it so tough.

He wrote back, with heartfelt thanks, in the middle of a losing streak.

"He came in as a skinny little kid," Cavani said. "But he always had a great personality. He had a real good rapport with everyone. You could look at him and know he was going to make it. "He doesn't have to come back and take a sentimental journey anywhere, but he comes back every chance he gets. Boomer made a lot of friends, and he hasn't forgotten them."

Claiborne was a tough guy, fair and of a football-only mind. He wouldn't let Esiason play baseball.

"I was under the assumption I was going to be able to play baseball at Maryland," Esiason said. "But I'll never forget Jerry Claiborne saying, 'Son, you're here on a football scholarship. We need you out there in spring practice. If you want to make the team as a quarterback, you've got to be out there.'

"And the funny thing about it was, the first two years I was there (1979-80), I didn't play. All I did was practice. My freshman year, I played on the freshman JV team, punting, returning punts, quarterback—I did a little of everything. But I never did get to play baseball."

Well, almost never. He organized a baseball game between the Maryland football players and the baseball players. Boomer pitched, striking out five guys in two innings. He never played again, but he had the ability.

Claiborne, now an athletic fund-raiser at Kentucky, didn't use him right away, but says he saw the potential.

"We don't downgrade our players when we redshirt them," Claiborne said. "We do it with a purpose of making them better." Claiborne had a quarterback factory going at Maryland. Also in his stable were Stan Gelbaugh and Frank Reich, both of whom made it to the NFL. Esiason would be the best of them.



During his College Park years, Esiason threw 42 TD passes.



"We thought he had a strong arm," Claiborne says. "He could throw a sideline cut from the hash mark to the opposite sideline, and you don't find many high school kids that can do that."

"We also thought he had a presence about him that he could kind of feel the pressure and sneak away and make the big play for you. That's something you don't coach. He just had that feel."

"But at the beginning of his sophomore year, we didn't feel like he was ready to be our quarterback."

So Esiason sat out another year.

It wasn't until 1981, his third year at Maryland, that Esiason got to play on the varsity.

He had almost left before he got his chance, but stayed. "I decided to honor my commitment to Maryland," Esiason said. "I don't know why. To this day, I don't know why."

In 1981, he was still third string. Sitting out two years, and still third string.

But the two guys ahead of him got hurt, and Esiason was in there, at home, starting the second game of the season, against West Virginia.

"The only reason I played that year was because two guys got hurt in the first game," Esiason said. "If those guys are healthy [Brent Dewitz and Bob Milkovich], maybe I don't play."

"We lost that game. My first play from scrimmage was a 17-yard sack. I'll never forget a game that year, my first against

North Carolina. A guy by the name of Calvin Daniels hit me and knocked me unconscious and I thought I'd broken my neck. They carried me off the field."

The Terps finished 4-6-1 that season, with Esiason completing 122 of 242 passes for 1,635 yards and nine touchdowns. He was intercepted nine times. At the end of the season, Claiborne left to coach at his alma mater, Kentucky. Esiason understood, as he had begun to understand why he sat out two seasons.

"Claiborne was the one who gave me the opportunity to play," Esiason said. "He was at that time an extremely tough football coach. Discipline, hard work, come in shape. I was a kid from Long Island. I didn't fit his mold. If anything, Coach Claiborne made me a tough football player."

"We had a play in our offense where you pitch it to the tailback and lead around and block. We would have to block linebackers and defensive linemen. And I'll tell you what, he wouldn't stand for quarterbacks running the ball and sliding or a guy not blocking down field."

"A quarterback had to be in the weight room. He taught me a lot about playing with injuries and pain and taught me a lot about football being a physical and a mental game, where a quarterback has to be physical."

"I give him a lot of credit for making me that way. The same as my high school coach."

Imagine the delight of Bobby Ross, who was hired to replace Claiborne, to find a quarterback such as Esiason already in the program.

"He was a nice quarterback to inherit," understates Ross, now the coach at Georgia Tech. "He was one of the hardest workers I've ever had. Outwardly, he comes off cocky, but he's just confident. He has tremendous self-confidence. He was young under Coach Claiborne, but when he threw the ball, it was like out of a cannon. He had the competitiveness of a linebacker and great leadership. Those were things you could see right away." Maryland and Esiason prospered under Ross. The Terps completed two 8-3 regular seasons and played in two bowl games—the Aloha and Florida Citrus—although they lost them both. Even losing had its highlights.

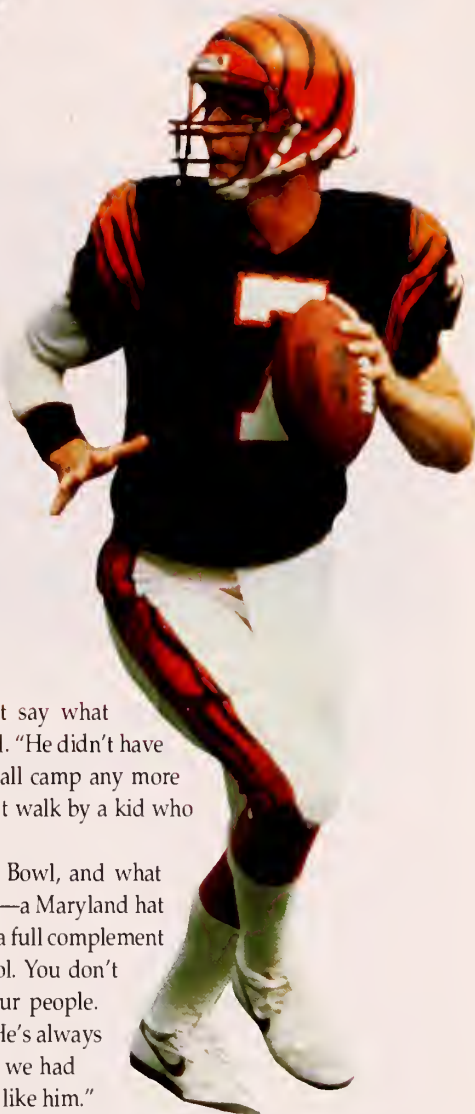
"The game we played my junior year against Penn State, we were 21-point underdogs and we lost by like 7-10 points (39-31)," Esiason said. "We played in the Aloha Bowl against Washington and we should have won that game, but we lost on the last drive (21-20)."

Before the game was finished, Esiason was named most valuable player. When Washington won, they gave the award to the other quarterback.

As a senior, he prospered even more, and learned other lessons, although he found out some people still didn't believe. Duke's Ben Bennett beat him out as first-team All-ACC quarterback, and Bennett was named conference player of the year. Then Esiason, expecting to go in the first round of the NFL draft, went in the second round, the first quarterback chosen, but the 38th pick overall. Setting 17 offensive records at Mary-



**As a Bengal,
Esiason was
named the NFL's
Most Valuable
Player in 1988.**



land wasn't enough to get him higher.

"Someone wrote a note and put it on the windshield of my truck after the draft, 'You're not as good as you think you are,'" Esiason said. He showed that person he was. "There were some people there who believed in me. They never pampered me. As a matter of fact, they made it tougher. I'll never forget being named captain.

"Coach Ross said, 'I don't think you should be captain, because you're already a silent captain.' I understood what he was saying. He said don't worry about it. And I didn't worry about it. I didn't need my ego padded. At that time, when he came in, I had been through a lot. Bobby made it an honor to be a football player."

His quarterback coach, Joe Krivak, is the head man now. "If you wanted your father to be some way, he would be your father," Esiason said of Krivak. "He would teach you right from wrong. And his integrity and his credibility are unmatched." Again, the loyalty.

"I remember my last game at Maryland, against North Carolina," Esiason said. "It was my last game at Byrd Stadium. As auspicious a start as I had when I first got there, the final three years of my time there were tremendous.

"I grew to love the stadium, the history, the tradition that it stood for. It was a very touching moment. I went there and sat in the stadium that night [after the game] for a couple of hours, walking around out there thinking of all the great times, and all the tough times that I had. Sometimes, the tougher it is for you, the more enjoyable it is when you make it."

Even then, he didn't forget. Before he took his nostalgic trip, he went to a Dancers Against Cancer event, donating his time and jersey off his back, for the cause.

In the spring of 1984, he got his communications degree. He goes back, and his pride is undiminished.

"The school has so much potential. There's so much potential there for greatness. Academically it's solid. Athletically it can be one of the best schools in the country. And it can be done the right way. Everyone has to work together."

Even Krivak, who knows him so well, is amazed when Esiason says and does things, such as helping out at the Maryland football camp.

"Too many people don't say what they should say," Krivak said. "He didn't have to be at the Maryland football camp any more than I have to fly. He doesn't walk by a kid who wants an autograph.

"They play in the Super Bowl, and what does he wear after the game—a Maryland hat and T-shirt. He just donated a full complement of weights to his high school. You don't forget people who help your people. He's on our highlight tape. He's always been willing to help. I wish we had more alumni willing to give like him."

Krivak wishes he had more players like Esiason.

"As soon as I saw him on film, I knew he would be as good as he wanted to be," Krivak said. "All he wanted to do was win. He said, 'Coach, you tell me what to do, and we'll do it.' He wasn't brash or cocky, he was confident. He practiced well. We had noon meetings and he'd miss lunch, so my wife would pack him a lunch. She'd send brownies for those players who were hurt and he would say they had magical powers in her brownies.

"When he comes into town, he generally calls. I'm elated he's so pro-Maryland. He gave us a day of his time at our camp. He's come to basketball games. He's given back."

It is all part of the way Esiason lives his life. He still talks about Fletcher Hall, and "the 'Vous," where he acted up as an undergrad. When he goes back to basketball games, he sits in the stands with his buddies.

"I was in the 'Vous with those people," Esiason said. "I sat in the student section during basketball games when I was there. I go out and still have some beers with the guys. I have fun. I enjoy people."

And Maryland enjoys the days it continues to have with Boomer Esiason.

Marc Katz is a reporter for the Dayton Daily News.



David Driskell is a leading authority on African American art.

The Busy Music Faculty: Survey Uncovers a Multitude of Recordings

Last fall acting music department chair Leon Major asked Rachel Wade, assistant research scholar in the C.P.E. Bach edition project, to gather a list of department-related recordings. He thought it would be interesting to know what faculty recordings were currently available and perhaps display some of them at university concerts.

Major had no idea that the list would end up with more than 140 separate items on it. They range from jazz to classical, from massed choral works to gridiron favorites. And new releases are coming out each month.

Among those who have made many recordings are, of course, such well-known faculty artists as the members of the Guameri String Quartet, pianist Santiago Rodriguez, and baritone Dominic Cossa. In addition, violinist Jaap Schroder and cellist Kenneth Slowik are now adjunct members of the faculty, and this adds their many recordings made for the Smithsonian Collection and others to the department's ever-growing list.

For details of the rich and diverse musical offerings produced by the university music faculty, call Wade at (301) 405-5548.



David Driskell Featured in Film on African American Art

From the streets of Harlem to a College Park lecture hall to the rural countryside of his native Georgia, David Driskell tells the rich story of African American painting in "Hidden Heritage," a British film that premiered recently in London.

Driskell, professor of art at College Park, arrates the 55-minute film which deals with African American art and its role in African American culture from the late 18th century through the Harlem Renaissance of the 1930s. The film was produced by Cue Films for broadcast on Channel 4 Television in Great Britain and was premiered in November at the British Academy of Film and Television Arts.

Acclaimed for his work both as an artist and as an historian of African American art, Driskell approaches the subject from a personal and scholarly perspective.

"I am the grandson of slaves. As an art historian, I present the soul struggle of black artists and their two centuries of art in America. Their art is not different from any other art in form and color. Art has no racial barriers," Driskell says in the film.

Driskell presents the individual work of African American artists in the context of their social history. The influence of emancipation, Jim Crow laws, racial violence and segregation on the art are described by Driskell in the film.



The Art Gallery
regularly features the
work of noted artists.
Andy Warhol's
Athlete Series was
displayed last fall.



A 'Window' Opens for Art Donations

If you've ever considered donating a work of art, a change in 1991 tax laws might make this the year to do it. According to Gwendolyn Owens, director of The Art Gallery at College Park, donations are a great way for alumni "to share something artistic you've enjoyed with the next generation." She adds that with the 1991 tax "window," there is a new incentive to give something back to your school.

Prior to 1986, donated works of art could be written off for tax purposes at market value, but changes in that year closed the "window" for many people. The changes meant that donations could only be deducted for the amount

that was paid for the work when it was purchased. This development adversely affected many art museums, such as The Art Gallery, that work with very limited budgets and therefore rely heavily on donations to build their collections.

"The changes in 1986 scared many people away from giving art," said Owens. "About 99 percent of our collection is donated, and most of our pieces were acquired prior to 1986."

As the result of a compromise in Congress, the 1986 tax constraints will be rescinded for 1991, and any donations made during this year can again be deducted at full fair market value. The tax "window" will be further increased by a provision allowing large gifts that exceed the donor's annual charitable limitation to be carried over into succeeding years. Museums and states with large arts industries, for instance New York, will likely be lobbying hard during the next year to maintain this deduction in an effort to reverse the losses they have experienced since 1986.

In order to take advantage of the 1991 tax provision for charitable donations of tangible personal property, including art, the transfer must be made before Dec. 31, 1991. People interested in donating to The Art Gallery should contact the gallery office at (301) 405-2763.

What's it like to be the director of The Art Gallery?
See page 17.

Long Way Back to the Stage for University Pianist

Pianist Bradford Gowen's performance March 15 at College Park with cellist David Soyer as part of the Artists Benefit Scholarship Series took an unimaginable amount of preparation. It wasn't that the repertoire—sonatas by Mendelssohn, Chopin and Frank Bridge—was unusually difficult for the veteran of nearly 35 years on the concert stage. Gowen, professor of music and head of the piano division at College Park, faced a more fundamental challenge: he relearned to play the piano.

More than five years ago, Gowen began experiencing severe pains in his right hand. The condition halted Gowen's routine of daily practice and forced him into a long process of research and reflection to determine whether and how he could play again.

For five years, as the pain persisted, Gowen consulted doctors, fellow musicians and available literature on the subject of performance-related injuries. In searching for a cause of and a solution to his problem, he found mainly that answers are scarce. Although the symptoms of performance-

related injuries are relatively easy to describe, a prescription of treatment that allows a performer to resume intensive work on a keyboard is often, as in Gowen's case, elusive. Two musicians may exhibit identical symptoms but the cure for one might do nothing for the other, he says.

"A player in this situation is an explorer in a wilderness," Gowen wrote in a recent article on the subject.

In making his way back to the stage, Gowen has worked through a complicated process, literally relearning to play his instrument. He has adapted his playing technique and practice habits in ways designed to keep the injury in check.

While unwelcome, the experience has been instructive to the pianist. "I have found this unexpectedly exciting," Gowen wrote. "To believe that there is a way, even though it is unmapped, to know within myself that the path exists even though it is not yet seen—this is exhilarating. It puts one on the cutting edge of faith, of growth, of music medicine and of recovery. That being so, the long, tiring journey cannot be regretted."



Avis Cohen provides hope for patients with spinal cord injuries.

Probing the Secrets of Paralysis

As many as 225,000 Americans are paralyzed due to spinal cord injuries. Currently, there is little that can be done to repair these types of injuries. But research by Avis Cohen, associate professor of zoology and associate professor at the Institute for Physical Science and Technology, is laying the groundwork that may someday lead to new approaches to helping victims of spinal cord damage regain the use of their paralyzed muscles.

Using the lamprey, a fish that is one of the most primitive vertebrates (animals having spinal cords), Cohen became the first person to demonstrate functional spinal cord regeneration in a vertebrate. More recently, Cohen has shown that nerve fiber regeneration in this fish can result in dysfunctional, as well as functional, nerve fiber regrowth. This knowledge is helping provide important clues regarding the intricacies of central nervous system damage and repair.

In her earlier work, Cohen showed that even after the spinal cord was severed in lampreys, the cut nerve fibers regenerated and reconnected themselves, enabling the fish to regain at least some of its swimming ability.

These findings fueled hope that scientists eventually might be able to similarly stimulate nerve fiber regeneration in humans. But Cohen's new results suggest that spinal cord regeneration may be much more complex than originally thought. Accordingly, Cohen cautions that many hurdles remain before the results of her research can be applied to humans. "Our work suggests some of the complexities that will have to be addressed in future research," she says. "Because even if regeneration can be made to occur in humans,

it does not guarantee that the regrowth will be functional."

One of the major issues yet to be resolved concerns nerve fiber alignment. Even if damaged human nerve fibers in the spinal cord could be made to regrow and reattach themselves across the injury site, the question remains whether each severed nerve fiber must align itself perfectly with the exact corresponding target on the other side of the wound in order for full motor function to be restored. An analogy might be what would happen if a large telephone line was cut in half and then haphazardly respliced. Although phone service would be restored, every telephone call placed would result in a wrong number.

But lampreys appear to have the ability—through some sort of compensating mechanism—to regain some degree of motor function even when regenerated nerve fibers are not perfectly aligned or functioning normally. Cohen says if damaged spinal cords in humans can be made to grow back together, even if the individual nerve fibers do not reattach themselves perfectly to the proper pre-injury nerve fiber site, some degree of function might still be restored. Once damaged nerve fibers are reconnected, even if imperfectly, physical therapy or other medical therapies might permit some people to regain at least some of their muscular function.

It is this hope that spurs Cohen on to seek answers to a complex human health problem in a simple fish. "We can study these complexities because unlike humans, the lamprey can regenerate spinal nerve fibers easily," she says. "And once we are able to stimulate regeneration in humans, we will know what to watch for."

TV Program Enters 'The World of Chemistry'

"The World of Chemistry," a 26-part television chemistry course airing this year on campuses and on public and cable television stations around the nation, was produced by College Park's Department of Chemistry and Biochemistry and the Educational Film Center in Annandale, Va.

The series of half-hour programs is designed to allow students to explore basic questions of chemistry and to understand its historical foundation, present contributions and future directions.

"The World of Chemistry" is the first-ever college-level telecourse in introductory chemistry that provides a complete one-semester sequence of study for non-science undergraduates.

"The series is quite distinctly different from any other educational video on chemistry," says Gilbert Castellan, a College Park professor of chemistry who helped develop the course series.

"Other videos are oriented toward a tough look at the fundamentals of chemistry while making it seem unapproachable for many people. But "The World of Chemistry" takes a look at chemistry in the everyday world around us."

Castellan and College Park chemistry professors Nava Ben-Zvi and the late Isidore Adler helped develop and produce the films as well as co-authoring the course study guide and faculty telecourse manual. Four other College Park faculty members also served on the academic advisory board for the series.



ILLUSTRATION: PETER ZULKARNAIN

Taking the 'Fishy' out of Fish Oil

Lately, fish oil is being hailed as beneficial for a variety of human ills such as heart disease, hypertension and arthritis. But convincing people of its medical effectiveness may be a good deal easier than talking them into swallowing the stuff.

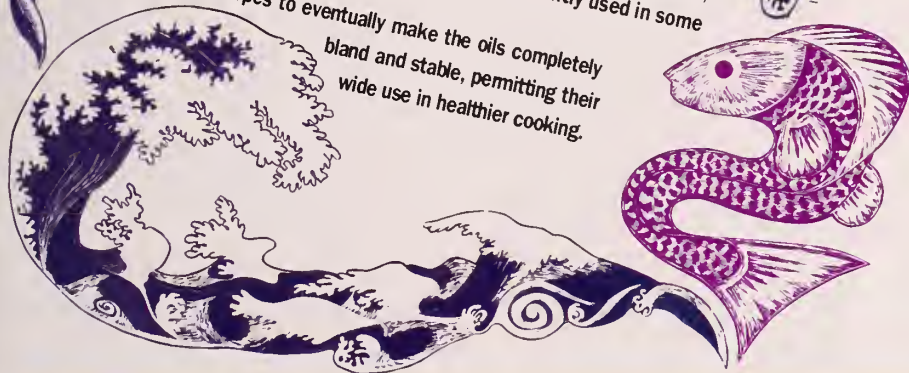
Carol Karahadian, however, thinks she has the answer—remove the offending fishy smell from the oil. Karahadian, assistant professor of human nutrition, is trying to make fish oils a healthy alternative to other oils used in cooking.

But she has found that though fish oils can be temporarily deodorized, they are highly susceptible to oxidation, the chemical process that causes their original fishy odors to return. By using vitamin E as a stabilizer, however, Karahadian has succeeded in neutralizing the flavor of fish oil for increasingly longer periods of time and with better results.

She says her neutralized fish oil is now ready for the market, possibly as a substitute for the vegetable oils currently used in some salad dressings.

Karahadian hopes to eventually make the oils completely bland and stable, permitting their wide use in healthier cooking.

ILLUSTRATION: CHRISTOPHER J. PAUL



Botanist Says Future Rice, Wheat Yields May Fall Short

Continuing depletion of the Earth's ozone layer and resulting increases in ultraviolet radiation could mean that current predictions of future world rice and wheat yields may be highly overestimated, according to a first-of-its-kind study at College Park.

Though some scientists have predicted that rice production could rise by 20 percent—owing to an expected doubling of carbon dioxide (CO₂) in the atmosphere during the next century—Professor Alan H. Teramura, chair of the university's Department of Botany, says these increases in yield would be cancelled out by the damaging effects of increased ultraviolet radiation.

This finding has serious implications for future food supplies because the world population is expected to expand from a present 5 billion people to an estimated 12 billion by the year 2100. According to demographers, 90 percent of that population will be living in poor countries that are highly dependent on rice as their primary source of nutrition.

According to Teramura, ultraviolet radiation inhibits growth in some crops while CO₂ increases production. The amount of CO₂ in the atmosphere is expected to double within 100 years due to the continued burning of fossil fuels. Ultraviolet radiation at the Earth's surface is expected to increase dramatically during that same period of time as the ozone layer shrinks due to the release of chlorofluorocarbons into the atmosphere.

Teramura's study is the first to examine the combined effects of these factors on crops.

"We wanted to see if increases of CO₂ can compensate for the damaging effects of ultraviolet radiation," he says. "We found that increases in CO₂ alone stimulated growth in rice and wheat crops by as much as 20 to 40 percent," he says. "But where we increased UV radiation simultaneously with the increased CO₂, we discovered that CO₂-elevated increases were wiped out."

"We know the environment is changing, and we had better begin to look for ways to breed more resistant crops for future conditions," Teramura concludes.

College Park Helps Build World's Largest Radio Telescope

Leo Blitz wants to answer the questions that children ask. Where did the sun come from? How did the universe begin? Why do galaxies look the way they do?

Blitz, a College Park professor of astronomy, is asking the same questions, and he is helping to build the world's largest radio telescope with which to help answer them.

The telescope, located in Hat Creek, Calif., is being expanded from six large dish-like antennas to nine, and will eventually bring about a five-fold increase in astronomers' abilities to glean information about our galaxy.

College Park's astronomy department is working on the project with the University of California at Berkeley and the University of Illinois Urbana-Champaign.

According to Blitz, radio telescopes detect radio waves produced by various phenomena such as

cosmic molecules. These signals, emitted at wavelengths of one to three millimeters, can be used to form images of astronomical objects that often are invisible to ordinary optical telescopes. They help answer the fundamental questions asked by children and scientists.

When work on the telescope is completed in the summer of 1992, the telescope will be the world's largest array of millimeter-wave antennas. It also will be the first earth-bound telescope to be completely remotely operable. "This array will open a new window to the universe," Blitz says.

According to Blitz, construction costs for the project are being shared by the three universities in the consortium. Because some of the grant money for the telescope is coming from the National Science Foundation, about 30 percent of the observation time is available to scientists outside the consortium.



Swimming Coach Steve Mahaney emphasizes academics as well as athletics.

Staying In the Swim at Maryland

They're in the water at 5:30 a.m. They work in the weight room from 7:30 to 8:30 a.m. They attend classes from 9 a.m. to 2 p.m. and are back in the water for two more hours in the afternoon. The training continues six days a week, with no time out for holidays.

"It's one of the hardest working teams on campus," says head coach Steve Mahaney proudly of his varsity men and women swimming team. Mahaney believes in intense training and discipline. "It's simple," he says. "The only way to get better is to train and train well."

But Mahaney is not just interested in having his swimmers break records. He makes his philosophy very clear at the beginning of each year: "Your first priority is to your education. You did not make the choice to attend the University of Maryland merely to swim fast," he tells his student-athletes.

And they hear the message. The women's swimming and diving team earned the Spring '90 All-Academic Honors from the College Swimming Coaches of America. In December, 11 men and women from the 42-member team were honored for sustaining a 3.0 grade point average for the full school year 1989-90. Heagy Scholarship Winner Kurt Kendall, the team's captain, has been accepted at graduate school at Harvard and MIT. A senior chemistry major with a 3.89 grade point average, Kendall received the NCAA 1989 Academic All-America award for having the second-highest GPA in the nation.

The group does equally well in the water. April Tassi, a junior captain, was named an

NCAA All-American in the 3-meter dive and 10-meter tower, the first Maryland woman diver to earn All-America honors. Kendall is All-ACC swim team and holds several school and Cole Field House records. Other recent All-America swimmers from Maryland were Mike Lambert and Wendy Schaper in 1989. In the 14-event season, swimming against such schools as North Carolina, Duke, Clemson, Navy, and Virginia, the team has a respectable win-loss average, and has shown steady gains in recent years.

New Look for Byrd Stadium

The initial phase of a large-scale renovation of Byrd Stadium should be completed in time for the 1991 football season, says Curt Callahan, assistant athletic director for facilities.

A new press box and new seating on the south half of the stadium bowl are being installed as part of a construction project that began in late October. The new, three-level press box is being built in the location of the previous one but will be seven times larger. New restrooms and concession stands will be installed in addition to 20,000 new seats on the stadium's south side.

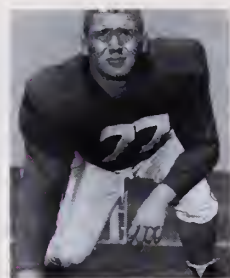
Because early work on the seating proved less involved than expected, workers might also begin replacing seats on the north side of the bowl, Callahan says. That work has been scheduled for fall 1991 and will be completed then if it is not included in the current phase of the project.

In addition to seating, work beginning next fall after the 1991 football season will include new restrooms and concession stands on the north side and construction of a new football team building.

Despite the construction, the stadium will remain open this spring for at least three men's lacrosse games.

The stadium renovation project is part of a plan to upgrade facilities for intercollegiate athletics through funds raised by the athletic program and matched by grants from the state.

Stan Jones '54 Is Elected To Pro Football Hall of Fame



Stan Jones excelled as a Terp and as a Chicago Bear.

Stan Jones, a College Park graduate who played on the Terps' national championship team of 1953, was elected in January to the Pro Football Hall of Fame. Jones, who spent 12 years with the Chicago Bears before ending his pro career with the Washington Redskins in 1966, is the first College Park alumnus to be voted into the Hall.

At College Park, Jones was a three-year starter and was drafted by the Bears when he was a junior. In 1953, he was named Lineman of the Year by Collier's magazine and won the Knute Rockne Memorial Trophy.

Jones played offensive tackle and guard for the Bears, played both ways in 1962, then switched to defensive tackle permanently in 1963, helping lead the Bears to the NFL title.

He asked to be traded to the Redskins in 1966 so that he could play a final season near his home in Rockville.

Jones was an assistant coach with the Cleveland Browns last season, and will coach defensive linemen for the New England Patriots in 1991. Jones was selected by the Seniors Committee of the Hall of Fame because he played most of his career before 1966.



Introducing the Colonnade Society

Saturday, June 22, 1991, will mark the beginning of an entirely new initiative at the University of Maryland at College Park. University President William E. Kirwan and campus and community leaders will host the first annual Colonnade Society dinner, the official kick-off of the newly formed Colonnade Society, organized to honor those who generously support the College Park campus on an annual basis.

The Society's name and the club level names associated with it — the Cornerstone, Pedestal, Portico, Pillar and Steeple Clubs — were chosen for their architectural reference, signifying the foundations and support of our beautiful campus.

Over the last twelve months, staff, faculty and volunteers have worked to formulate a plan for the new society. We've learned from notable programs throughout the nation that the most successful donor recognition societies are campus-based; are heavily driven and sustained by the energies of key volunteers; and are seen by the campus community as providing the gifts that form the backbone of private support to the university.

The Colonnade Society has been created to recognize those alumni and friends whose generous annual gifts sustain the University of Maryland at College Park.

While most large university campuses have had annual giving societies in place for many years and benefit from the broad base of support and long-term loyalty that these societies generate, College Park has relied

solely on the strong tradition provided by the Presidents Club, the system-wide lifetime giving society. In creating the Colonnade Society, College Park reaffirms its commitment to broad-based annual fund raising and to the ongoing appreciation, involvement and stewardship of very important friends and alumni.

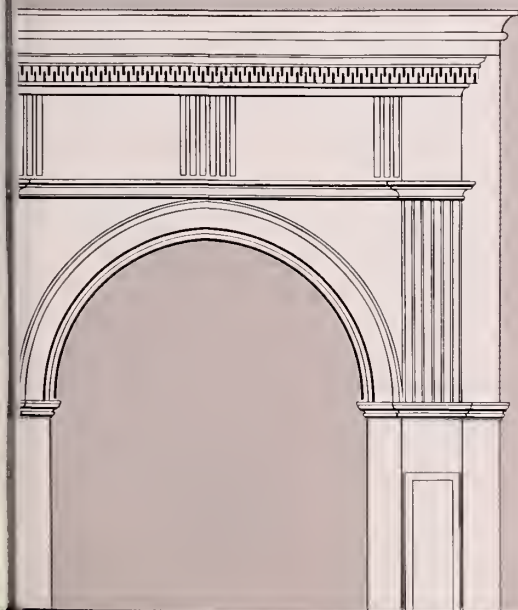
The Colonnade Society will become an important companion organization to the Presidents Club, providing long-needed donor recognition at the campus level. Presidents Club members who continue to make annual gifts of \$1,000 or more will automatically be members of the Colonnade Society. Members of the Colonnade Society, meanwhile, will attain membership in the Presidents Club when their accrued giving reaches the \$10,000 mark. While the Presidents Club recognizes lifetime giving, the Colonnade Society honors annual gifts.

Currently, there are about 2,000 individual gifts of \$1,000 or more given to College Park annually. We expect that through increased interaction, recognition, and information-sharing, the university will eventually double or triple the number of individual annual gifts. Colonnade Society members will be recognized through invitations to the new annual dinner, and through publications and mementos. Based on the foundations laid by the Presidents Club leadership, this new society finally provides College Park with the opportunity to say "thank you" for the loyal support of the university's most generous alumni.

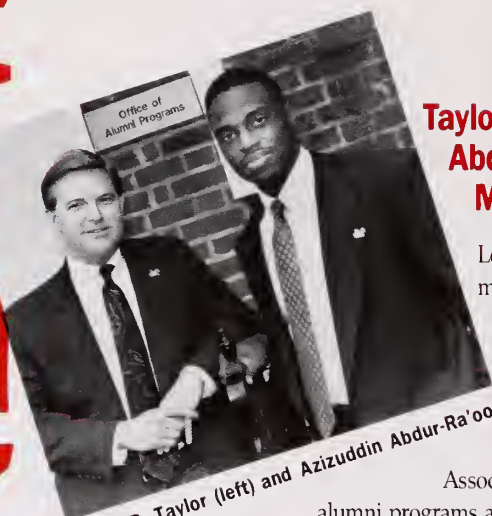
A mailing inviting charter members was sent to a small number of alumni and friends. If you did not receive this mailing and would like more information regarding the Colonnade Society and its first annual recognition dinner, please contact the Campus Development Office, 2101 Turner Building, College Park, Md. 20742 or call (301) 405-4631.



The Colonnade Society honors those who generously support College Park annually



UNIVERSITY OF MARYLAND AT COLLEGE PARK



Loren R. Taylor (left) and Azizuddin Abdur-Ra'oof

Taylor Is Director of Alumni Programs; Abdur-Ra'oof Is Assistant Marketing Director

Loren R. Taylor, a veteran of more than 10 years experience in alumni membership development, volunteer supervision, sales and marketing with the University of Kansas Alumni

Association, is the new director of alumni programs at College Park. He will also serve as executive director of the Alumni Association Inc.

Taylor will oversee the activities of the campus office that is responsive to the needs of some 163,000 College Park alumni.

Azizuddin Abdur-Ra'oof has been appointed assistant director of alumni marketing and regional programs.

Taylor, who replaces Leonard Raley, now assistant vice president for institutional advancement, is responsible for the coordination and marketing of all activities and programs for the alumni of the College Park campus. He will oversee the Alumni Programs Office, and the Alumni Association Inc., as well as regional alumni clubs, corporate programs, reunions, the Student Alumni Board, membership dues solicitation, merchandising and Homecoming. He also will provide staff assistance to the 11

constituent alumni chapters.

While at Kansas, Taylor also served as director of membership development and director of alumni chapters and student programs. He holds a B.A. in journalism and an M.A. in communication studies from the University of Kansas.

Abdur-Ra'oof, a standout record-setting wide receiver with the football Terrapins while an undergraduate student at College Park from 1985-1987, has been marketing coordinator for University College's Graduate School since 1989. As assistant director, Abdur-Ra'oof will be responsible for directing a dues-based membership marketing program and developing and coordinating local and national alumni clubs and activities. He also will develop and produce a volunteer leadership handbook for regional clubs and conduct three major membership campaigns during this year.

Abdur-Ra'oof earned a B.A. in speech communications from College Park and currently is working toward a master of general administration degree from the University College Graduate School. While at College Park, he served as a member of the Chancellor's Student Advisory Committee and the Task Force on Student Athletics and was elected to the Atlantic Coast Conference Honor Roll.

For more information
or to obtain detailed
travel brochures:

Call Joan Patterson
(301) 405-4678 or
1-800-336-8627

or write to:

Office of Alumni
Travel (Administrative
Agent), University of
Maryland System,
Rossborough Inn,
College Park, Md.
20742

1991 ALUMNI TRAVEL PROGRAM

The Grand Canyon Weekend:

May 4-7; \$699

Travel Agency: Matterhorn Travel Service



The Grand Canyon Weekend—

California Combination:

May 4-12; \$1495

Travel Agency: Matterhorn Travel Service

Pousadas & Paradors of Portugal & Spain:

May 23 - June 5; \$3,499 from JFK

Travel Agency: Intrav

Elbe: Pioneer Cruise Through Eastern Europe:

July 19-31; \$3,495 from JFK/\$3,595 from
Dulles

Travel Agency: Alumni Holidays, Inc.

Lord Baltimore Tour to Scotland & England with Professor David Fogle:

July 31 - August 14; \$3,100

Travel Agency: Travel Magic



Canada and New England Cruise:

August 24-31; from \$1,045 plus special low
air add-on fares

Travel Agency: Hudson Mercer Travel Associates

Munich Oktoberfest: The Alps, The Rhine, The Romance of Venice:

September 26 - October 3; \$1,495

Travel Agency: Matterhorn Travel Service

Exploring San Francisco Bay & the California Delta Aboard the Yorktown Clipper with Dr. Bernard A. (Pete) Twigg:

October 12-19; from \$1,200 plus special air
add-on fares

Travel Agency: Clipper Cruise Line



Cruising Polynesia, Hawaii & Tahiti Aboard the Sea Princess:

November 1-12; from \$2,595 (West Coast) with
special air add-on fare;

Travel Agency: Vantage Travel



College of Agriculture

Once again, the College of Agriculture Alumni Chapter can boast of success with its Annual Agriculture Career Network. This year the network was held on campus in the Stamp Student Union on March 12.

More than 30 companies and agencies in the agricultural industry were represented at the event, tripling last year's participation.

Immediately following the Agriculture Career Network, alumni, faculty, staff, students, parents, friends and future students of the College of Agriculture gathered at the Columbia Inn for the Annual Alumni Chapter Reunion and Awards Program.

On Oct. 26, 1990, the College of Agriculture proudly dedicated the Avrum Gudelsky Veterinary Center. The Center promises to be one of the best veterinary medicine programs in the United States.



Other news in the College of Agriculture includes the upcoming fall dedication of the new Animal Sciences Building and plans for a new hands-on agricultural teaching facility and pavilion on campus.

Would you, or someone you know, be interested in serving as a member of the Agriculture Alumni Board of Directors? If so, please contact chapter president John Wells, 14318 Woodcrest Drive, Rockville, Md. 20853, (301) 871-7818 (home) or (202) 245-5377 (work), with nominations.

College Park Band Alumni

The Band Alumni group was started in 1989 and has 300 members. The group raised \$20,000 for an endowment fund and a presentation was made at the annual concert in November at Tawes Theater. The endowment is named in behalf of Director John Wakefield to honor his 25th anniversary with the University of Maryland at College Park Band Department. The endowment will be used to enhance all areas relating to the Band Department.

College Park Alumni Magazine Wins National Award



In September, the University of Maryland at College Park and Editors Press of Hyattsville, Md., won an award for the Spring 1990 issue of *College Park*, the university's alumni magazine, in Publishing & Production Executive magazine's 1990 Gold Ink Awards competition.

The national competition recognizes the "Best Produced Printing" in a wide variety of publication printing categories. Three winners in each category were selected from over 2,000 entries nationwide and were featured in the September 1990 issue of *Publishing & Production Executive*.

College of Business and Management

Alumni in the College of Business and Management have established a unique program designed to strengthen ties between the business school and the corporate community of the Mid-Atlantic region.

According to Paine Webber executive Charlie Bross, who chairs the alumni chapter's membership committee, the "Corporate Agents" program will not only benefit alumni, faculty, staff and students of the business school, it will favor the participating companies as well.

"Our Corporate Agents program will be a model for other business schools to follow," Bross says. "It will allow us to communicate with Maryland alumni in a timely, consistent and personal way—and, at the same time, build our alumni membership and benefit the regional business community."

According to Bross, the typical corporate agent will be a high-placed individual in a local company that has 10 or more University of Maryland graduates as employees. Involvement in the program, estimated to be about an hour and a half each month, would include acting as a liaison for chapter news and events, providing feedback to chapter leadership and "talking up" social events, such as the Gala (May 4) and Golf Tournament (Sept. 19).

For more information on the Corporate Agents Program, contact Charlie Bross at (301) 718-5079 or Alumni Director Tim McDonough at (301) 405-2301.

Economics

The College of Behavioral and Social Sciences and the Department of Economics would like to continue the expansion and growth of the Economics Alumni Chapter. Any interested alumni should contact Shannon Whalen at (301) 405-1688.

College of Education

The College of Education alumni chapter launches its annual Summer Gala on June 5, 1991, at the Rossborough Inn on the College Park campus. The event will begin at 5:30 p.m. with a social hour, followed by a program focusing on alumni events from throughout the year, plus an opportunity for interaction with Dean Scannell and other university leaders. Past alumni board presidents will be invited as guests of the chapter. You won't want to miss this first of what is planned to be an annual series of College of Education alumni activities, and the chance to enjoy the Rossborough buffet which will follow at 7:30 p.m. Tickets are \$20 per person and can be obtained by contacting the dean's office at (301) 405-2340.

The chapter is seeking alumni who are willing to serve as career advisors in their respective fields on an "on-call" basis. This kind of resource will prove to be a valuable tool for future graduates. For more information regarding the Alumni Career Advisory Network (ACAN), please contact the dean's office at (301) 405-2340.

College of Engineering

The Engineering Alumni Chapter continues to build upon its tradition of service to the College of Engineering. The chapter was proud to be one of the sponsors of The Pride of Maryland, the university's solar-powered car. The car was one of several attractions in attendance at the annual bull roast, held Sept. 23 at the NASA/Goddard Space Flight Center Recreation Center. The award-winning concrete canoe was another of the interesting student projects on display at the event. We have set the date for next year's bull roast, so plan ahead to come to the 32nd annual Engineering Alumni Chapter Bull Roast on Sunday, Sept. 22, 1991. More information about the bull roast will be sent to alumni during the summer.

Another event to look for is the chapter's annual dinner and presentation of the Engineering Distinguished Alumnus and student service awards. This event will be held in early June. If you have not received any information and are interested in attending this important event, contact the dean's office at (301) 405-3870.

The chapter is always pleased to learn of people who are interested in becoming involved in chapter activities. If you would like to help with the annual dinner or the bull roast or want to serve on the alumni chapter board in future years, please send your name, address and telephone number, and how you would like to participate, to the Engineering Classroom Building, University of Maryland, College Park, Md. 20742.

Government and Politics

The Government and Politics Alumni Chapter is actively seeking interested alumni who are willing to volunteer their time to help in the planning and implementation of chapter events. Last year's mentoring programs were extremely successful and the chapter is planning to continue to offer these programs for interested students.

At the present time, a spring reception is being planned for alumni, graduating seniors and their parents. For more information, contact chapter president Mike Onley at (301) 868-7900 or Shannon Whalen at (301) 405-1688.

College of Journalism Honors Distinguished Alumna Rose Kushner

In 1972, Rose Kushner graduated with honors from the College of Journalism. Like most graduates, she pursued her career in journalism with enthusiasm and dedication. Unlike most, however, she had an undeniable impact on the world, altered the lives of millions and influenced an entire profession to rethink its position.

Rose Kushner was a crusader in the battle against breast cancer. She was an advocate for all women, like herself, who lived with the disease. She fought tirelessly for the right of women to make informed choices about their health. She gained an international reputation and widespread respect in the medical community through her feisty but thoughtful advocacy, both written, through numerous books and articles on the subject, and verbal, through her participation in important conferences and panels.

Rose Kushner fought for a "two-step" process whereby women would be given the opportunity to participate in the decision of whether to undergo a mastectomy, lumpectomy or reconstruction. "What we want from the doctors are the alternatives, their dangers and risk," she wrote. "Finding the lump is a cause for concern, but not for blind panic; for speed, but not frantic rush. And we do have the right to choose the surgery..."

On March 2, at the College of Journalism's first alumni reunion on campus, the late Rose Kushner was named Distinguished Alumna. In this way, the College's teachers, administrators and alumni proudly acknowledge her remarkable commitment and contribution to the profession.



College of Library and Information Services

The CLIS Alumni Chapter celebrated the 25th anniversary of the college during its Alumni Day on Nov. 2 and at a grand champagne reception on the evening of Nov. 3. Many of the graduates of CLIS, the faculty, and the staff came together to socialize and to hear of the conception and early years of the school. The chapter was especially proud to make the presentation of the first CLIS Silver Anniversary Scholarship award at the reception.

As a primary goal for the upcoming months, we are attempting to move forward with the Career Consultation program, which offers career mentoring.

In the fall, the chapter will have its 26th annual continuing education program/Alumni Day. The members of the chapter invite all CLIS graduates to that event and to participate in the workings of the group. Please make certain that you keep your address current so that we can notify you of all the future programs. For further information, contact Esther Herman at CLIS, (301) 405-2064.

Institute of Criminal Justice and Criminology

The Criminal Justice and Criminology Alumni Association Chapter is up and running. Officers and members-at-large have been elected, committees have been established, a constitution has been voted upon, and several events have been held.

Graduates of the Institute of Criminal Justice and Criminology or of the criminology concentration in the Sociology Department are welcome to join. Graduates from other departments may join as honorary members. For more information, contact Shannon Whalen, BSOS Alumni Liaison at (301) 405-1688.



School of Public Affairs

The School of Public Affairs Alumni Chapter will be conducting its third annual phone-a-thon on April 30 and May 7. We'll be calling all alumni to raise money for our student fellowship. We still need to raise a considerable amount of money before we can make it an endowed fellowship, so please consider giving, and giving generously.

Also upcoming are our annual meeting and picnic. No firm dates have been set yet (although the event is usually in late May or early June), but we urge all alumni to think about becoming more involved with the alumni chapter, and about submitting nominations for the Alumni Chapter Board. Watch your mail for more information about the nomination process and the annual meeting.

The School of Public Affairs is pleased to report that the first of its Public Policy Issues Breakfast Series was a smashing success.

The breakfast, held on Dec. 11, 1990, considered the issue of "The U.S. Industrial Base and International Competitiveness." More than 45 people heard Robert Costello, former undersecretary of defense for acquisition, and Paul Freedenberg, former undersecretary of commerce for export administration, speak about the current state of U.S. industry in the world market. The event was held on Capitol Hill and was co-hosted by Rep. Steny Hoyer (D-Md.).

The chapter hopes to use the Breakfast Series as a way to get SPA alumni and other professionals who work in the same fields together to hear from experts as well as exchange ideas and information. More breakfasts are being planned; if you would like more information or have an idea for a topic, please contact the alumni chapter president, Frank Baitman, at (703) 998-3790.

Radio, Television and Film To Form Alumni Chapter



The Department of Radio, Television and Film is in the process of forming an alumni chapter. All graduates, former students, friends and interested business associates are encouraged to participate. The department is interested in hearing from any individual or organization with an interest in the chapter.

The purpose of the alumni chapter is to strengthen the bonds between the department and alumni through planned programs and activities. For more information, please contact Dr. Robert P. Kolker, department chair, at (301) 405-6261.

Student Alumni Association

The fall of 1990 proved to be a semester of change for the Student Alumni Board. The Board is now called the Student Alumni Association and has a new advisor, Susan Sanderson of the Office of Alumni Programs. In addition, the Association has new leadership with President Heidi Platt, Treasurer Sara Gaughan, and Vice-Presidents Kelly Chapman, Kim Hooper and Lisa Roth.

Acting as a campus liaison between students, faculty and alumni, the association works with the Board of Governors of the College Park Alumni Association. All student members serve on the Board of Governors' Committees, which have the common goal of improving the quality of the University of Maryland at College Park.

The celebration will continue into the summer, as association members help to kick off the first annual Colonnade Society Dinner in June. This will be the first event for the newly formed Colonnade Society, organized to honor those who generously support the College Park campus on an annual basis.

For more information about the Student Alumni Association and its activities, please write to the Office of Alumni Programs, Rossborough Inn, College Park, Md. 20742 or call (301) 405-4678.

CP



ANNUAL MEMBERSHIP

Check membership desired:

ALUMNI

- ☐ Individual \$25
☐ Joint (husband & wife) \$35

Mail to:

College Park Alumni Association
University of Maryland
Rossborough Inn
College Park, MD 20742

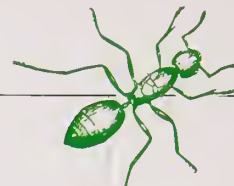
ALUMNI MEMBERSHIP APPLICATION

Full Name _____ Class _____
Degree(s) _____ Major/College _____
Spouse's full name _____ Class _____ (if joint) *
Degree(s) _____ Major/College _____
Your Social Security # _____
Mailing Address _____ (Apartment or Street number)
City _____ State _____ Zip _____
Telephone numbers: day () _____
evening () _____

*Both husband and wife attend UMCP.

Check made payable to **UMCP Alumni Association** enclosed for \$ _____

CALENDAR



MAY

1 Graduate School Distinguished

Lecturer: "Evolution of Afro-American Studies," Henry Gates, English, Duke U., 3:30 p.m., 2203 Art/Soc. Call 405-4258 for info.

Architecture Lecture: TBA, 7:30 p.m., Architecture Auditorium. Call 405-6284 for info.

2 Meteorology Seminar:

"Seasonal Forecastability," Kikuro Miyakoda, Geophysical Fluid Dynamics Lab, Princeton, NJ, 3:30 p.m., 2114 Computer and Space Sciences, reception at 3 p.m. Call 405-5392 for info.

Reliability Engineering Seminar:

"Neural Networks for Detection of Turbine Rotor Flaws," Nelson Steele, ARD Corp., 5:15-6:15 p.m. 2115 Chemical and Nuclear Engineering Bldg. Call 405-3887 or 405-3883 for info.

University Theatre: "The Taming of the Shrew," today-May 5 and 9-11, 8 p.m., Sunday matinee, 2 p.m., Tawes Theatre. Call 405-2201 for info.*

3 Geology Seminar:

"Regional Assessment of Groundwater Quality," William Alley, U.S. Geological Survey, Reston, VA, 11 a.m., 0105 Hornbake Library. Call 405-2783 for info.

Neuroscience Colloquium: "Notions Concerning Peripheral and Central Organization of the Vestibular System in Diverse Vertebrates," William Saidel, noon-1 p.m., 1208 Zoo/Psych. Call 405-6884 for info.

Mental Health Lunch 'n Learn:

"Post-Traumatic Stress Disorder in the General Population," Ken Curl, psychiatric social worker, Greenbelt, 1-2 p.m., 3100E Health Center. Call 314-8106 for info.

University Theatre: "The Taming of the Shrew," 8 p.m., Tawes Theatre. See May 2 for details.*

4 Pops concert, 8 p.m., Grand

Ballroom, Stamp Union.

University Community Concerts, Cleveland Quartet, program TBA, 8 p.m., Adult Education Center, \$17 standard admission, \$14.50 students and seniors. Call 403-4240 for info.*

Annual Business School Alumni Gala Dinner Dance and Award Ceremony, featuring speaker Victor Pepe '58, president, Senate Construction Co., 7 p.m.-1 a.m., Hyatt Regency Bethesda. Call 405-2301 for info.*

University Theatre: "The Taming of the Shrew," 8 p.m., Tawes Theatre. See May 2 for details.*

5 University Theatre:

"The Taming of the Shrew," 2 p.m., Tawes Theatre. See May 2 for details.*

6 Center for Global Change

Colloquium, Stephen Leatherman, Geography, noon-1:30 p.m. (bring lunch), 1137 Stamp Student Union. Call 403-4165 for info.

Black Faculty and Staff

Association Seminar: "Your Professional Image: Your Key to Success," Daisy Saunders, Saunders and Associates, noon-2 p.m., Maryland Room, Marie Mount. Call 314-7225 for info.

Meteorology Seminar: "Empirical Evidence for Multiple Equilibria in the Wintertime Northern Hemisphere Extratropical Circulation," Zoltan Toth, NRC, NMC, Camp Springs, MD, 3:30 p.m., 2114 Computer and Space Sciences, reception at 3 p.m. Call 405-5392 for info.

Campus Senate Meeting, 3:30-6:30 p.m., 1026 Reckord Armory. Call 405-5805 for info.

Horticulture Seminar: TBA, Pamela Jo Hathaway, grad. student, Horticulture, 4 p.m., 0128B Holzapfel. Call 405-4356 for info.

Space Science Seminar: Ed Roelofs, JHU/Applied Physics Lab.

7 Classics Department Lecture:

"Oedipus, Odysseus, Odin and Oida," Dorothea Wender, Wheaton College; response, Gregory A. Staley, 4 p.m., 2309 Art/Soc. Call 405-2013 for info.

Entomology Colloquium: "Light Lunches for Insects on Phototoxic Plants," May Berenbaum, U. of Illinois, noon, 1208 Zoo/Psych. Call 405-3912 for info.

8 Art Gallery MFA Thesis

Exhibition, today-May 17, The Art Gallery, Art/Soc. Call 405-2763 for info.

Center for Teaching Excellence

Faculty Discussion, keynote address followed by active dialogue, noon-1:30 p.m. (bring brown-bag lunch), Maryland Room, Marie Mount. Call 405-3154 for info.

9 Public Relations Council Meeting, 1:30-3 p.m.

Graduate Student Government Meeting, 3 p.m., 1143 Stamp Student Union. Call 405-5788 for info.

Meteorology Seminar:

"Relationship Between Jet Streaks and Severe Convective Storm Systems," Louis Uccellini, NMC, Camp Springs, MD, 3:30 p.m., 2114 Computer and Space Sciences, reception at 3 p.m. Call 405-5392 for info.

Reliability Engineering Seminar:

"Computational Aspects of Failure Analysis," William Snowden, Failure Analysis Associates, 5:15-6:15 p.m. 2115 Chemical and Nuclear Engineering Bldg. Call 405-3887 or 405-3883 for info.

"Physics is Fun"

Lecture/Demonstration: "Physics IQ Test," today-May 11, 7:30-8:45 p.m., 1410 and 1412 Physics Lecture Halls. Call 405-5994 for info.

University Theatre: "The Taming of the Shrew," today-May 11, 8 p.m., Tawes Theatre. Call 402-2201 for info.*

10 Speech Communication

Colloquium: "Evaluation of Arguments in Evolutionary Biology: The Case of Gould and Lewontin," Jeanne Fahnestock, English, noon, 0147 Tawes. Call 405-6524 for info.

University Orchestra, 8 p.m., Tawes Recital Hall.

University Theatre: "The Taming of the Shrew," 8 p.m., Tawes Theatre. See May 9 for details.*

11 University Theatre: "The Taming of the Shrew," 8 p.m., Tawes Theatre. See May 9 for details.*

12 University Chorale Pops Concert, 8 p.m., Adult Education Center.

13 Art Gallery MFA Thesis Exhibition, today-May 17, The Art Gallery, Art/Soc. Call 405-2763 for info.

Entomology Colloquium: "Multitrophic Interactions in Tropical Ant-plants," Deborah K. Letourneau, U. of California, 4 p.m., 0200 Symons. Call 405-3912 for info.

23 Commencement

JUNE

4 Maryland Summer Institute for the Creative and Performing Arts Piano Recital: Alexei Sultanov, gold medalist of 1898 Van Cliburn International Piano Competition, 8:15 p.m., Memorial Chapel, General admission \$10. Call 405-6543 for info.*

8 Maryland Summer Institute for the Creative and Performing Arts Concert: New York Chamber Ensemble, Stephen Rogers Radcliffe, conductor, 8:15 p.m., Tawes Theatre, General admission, \$10. Call 405-6543 for info.*

11 Maryland Summer Institute for the Creative and Performing Arts Concert: Lark String Quartet, winner of 1990 Naumberg International Chamber Music Competition, performing Mozart, Bartok, and Brahms, 8:15 p.m., Memorial Chapel, \$10 standard admission. Call 405-6543 for info.*

15 Maryland Summer Institute for the Creative and Performing Arts Concert: Noi Philharmonic, Gerhardt Zimmerman, conductor, performing Schwaner, Sibelius, and Strauss, 8:15 p.m., Tawes Theatre. Call 405-6543 for info.

18 Maryland Summer Institute for the Creative and Performing Arts Concert: Annapolis Brass Quintet, program spanning five centuries of music for brass, including Praetorius, Scheidt, and Weelkes, 8:15 p.m., Memorial Chapel, \$10 standard admission. Call 405-6543 for info.*

22 Maryland Summer Institute for the Creative and Performing Arts Concert: Noi Philharmonic, Catherine Comet, conductor, performing Bernstein, Mozart, and Mahler, 8:15 p.m., Tawes Theatre. Call 405-6543 for info.

25 Maryland Summer Institute for the Creative and Performing Arts Concert: National Symphony Orchestra Principals Woodwind Quintet, program TBA, 8:15 p.m., Memorial Chapel, \$10 standard admission. Call 405-6543 for info.*

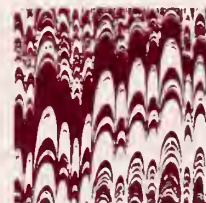
26 American Council on Education conference on curriculum transformation, June 26-7, 1991

29 Maryland Summer Institute for the Creative and Performing Arts Concert: Noi Philharmonic, Maximiano Valdes, conductor, performing Stravinsky and Bernstein, 8:15 p.m., Joseph Meyerhoff Symphony Hall (Baltimore), \$10 standard admission. Call 405-6543 for info.*

JULY

10 University of Maryland International Marian Anderson Vocal Arts Competition, July 10-20, featuring 40 of the world's best young singers. Call 405-6543 for info.

16 Maryland Summer Institute for the Creative and Performing Arts First American Vocal Arts Congress, July 16-20. A family gathering of American singers, to which all teachers, singers, students, and opera lovers are invited. Call 405-6540 for info.*



MARYLAND
SUMMER
INSTITUTE
FOR THE
CREATIVE
AND
PERFORMING
ARTS

*Admission charge for this event. All others are free.



ILLUSTRATION MARIA A. SESE

KEY

- AGRI** = College of Agriculture
- ARCH** = School of Architecture
- ARHU** = College of Arts and Humanities
- BMGT** = College of Business and Management
- BSOS** = College of Behavioral and Social Sciences
- CLIS** = College of Library and Information Services
- CMPS** = College of Computer, Mathematical, and Physical Sciences
- EDUC** = College of Education
- ENGR** = College of Engineering
- GRAD** = Graduate School
- HUEC** = College of Human Ecology
- JOUR** = College of Journalism
- LFSC** = College of Life Sciences
- PERH** = College of Physical Education, Recreation, and Health
- PUAF** = School of Public Affairs
- UGS** = Undergraduate Studies

Obituaries

Eleanor Glotfelty Robey, a member of College Park's original co-ed graduating class and the first woman to win a statewide oratorical contest, died in October 1989 at 85. Robey dedicated her life to education, teaching grades kindergarten through 12, and was active in many community organizations in the Washington, D.C., and Charles County areas. She helped found AHRC (Association for Handicapped and Retarded Children) in Charles County and was nominated in 1985 as an "Outstanding Senior Citizen of Charles County."

Deborah L. Watts, GRAD, Ph.D. '76, a counseling psychologist at UMCP's counseling center, died of an aneurysm in April 1990 at 42. Watts received her master's and doctoral degrees from the university's counseling and personnel services program. While a student, she helped establish the first on-campus women's rape crisis hotline. Prior to returning to UMCP in August 1989, Watts was a counselor at Indiana State University. She also worked at the Women's Counseling Center in Washington. Contributions may be made in her memory to The Deborah L. Watts Memorial Fund, University of Maryland Health Center, UMCP, College Park, MD 20742, to help students in Watts' field, or to The Vigo County Victims' Assistance Program, 201 Cherry St., Terre Haute, IN 47807, an emergency fund for victims of sexual and criminal assault that Watts helped establish.



Dr. Alexander Brodsky, ARHU, is a certified orthopedic surgeon on the medical staff of Texas Children's, St. Luke's Episcopal, the Methodist, Ben Taub, St. Joseph, and the Shrine hospitals as well as the Houston Veteran's Affairs Medical Center in Texas. Brodsky graduated from the University of Maryland Medical School in 1942 and served in the U.S. Army Medical Corps from 1943 to 1945. In 1950, Brodsky joined the full-time faculty at Baylor University in Houston and has continued his involvement there on a voluntary basis since 1952 while maintaining a private practice in the Texas Medical Center. Brodsky has been certified by the American Board of Orthopedic Surgery since 1951 and has served as an examiner on the board for 15 years.



J. Gordon Naegele has been named an honorary member of the American Institute of Certified Public Accountants. Naegele is a partner in Naegele & Mears, a firm he founded in 1987. He graduated *cum laude* from College Park.



Dr. Frederick B. Safford, ENGR, was recently presented the seldom-awarded Provost's Commendation Award for Outstanding Teaching and Student Counseling at Northrop University in Los Angeles, where he is chairman of aeronautical engineering and director of the engineering research laboratory.



Dr. Richard W. Seltzer, EDUC, was the dean of Plymouth State College in New Hampshire before retiring. Seltzer also served as superintendent of schools in Lower Moreland Township, Pa.



William R. Wilson, ENGR, received the 1990 Distinguished Alumnus Award from the alumni chapter of the College of Engineering. Wilson is chairman of the board and chief executive officer of Lukens Inc. Prior to joining Lukens in 1980, he earned an M.B.A. from the University of Chicago in 1970 and was senior vice president for engineering and corporate planning at Inland Steel Co., where he worked for more than 30 years.

Carmen Balthrop: Learning as She Teaches

Carmen Balthrop, '70 (voice performance), is an associate professor in the Music Department at her alma mater.

Five years ago, the University of Maryland asked Balthrop to teach a master's course in voice performance. Afterwards, she was asked to stay on as a professor in the field in which she has become internationally known.

Balthrop is still actively performing around the country, around the world. She made her debut at the Metropolitan Opera in New York City in 1977. She says her students appreciate that she is still performing while she teaches.

"You are always a better teacher when you yourself are still a student," she says. She herself has a teacher whom she works with regularly.

Balthrop has recorded a compact disc of Spanish and Portuguese songs called "Con Amores," and is now working on recording other works.

—Toni Guagenti



Emmert F. Bittinger retired in 1987 after 25 years of teaching in the sociology department of Bridgewater College in Virginia. He published his second book, *Allegheny Passage*. Bittinger received a Ph.D. from College Park in 1964. He lives with his wife in Bridgewater, Va.

John C. Sprague, BMGT, was appointed to the Maryland State Education Board in 1989. Sprague was employed at IBM for 35 years, where he worked on educational curriculum development and teacher training. He is active in various community-service organizations in Montgomery County and lives in Rockville, Md.



Clayton McCarl Sr., ARHU, was recently inducted into the International College of Dentists, which honors significant contributors to the science and art of dentistry. McCarl received his dentistry degree in 1956 from the University of Maryland and has a family dental practice in Greenbelt, Md.

Jerry C. Tobin, ARHU, BMGT '53, GRAD '54, has been re-elected Northeast regional director of the National Association of State Boards of Accountancy. Tobin is a member and past president of the New Jersey State Board of Accountancy, and is a principal with

Tobin and Collins, CPA. He lives in Hackensack, N.J., with his wife and four children.



Raymond C. Ashley, ARHU, is a commercial licensed underwriter and chartered financial consultant in Ft. Worth, Texas. He is president of Insurance Financial Planning Associates Inc. and past president of the Ft. Worth East Rotary Club. Ashley is a member of the Texas Leaders Round Table and the Ft. Worth chapter of the American Society of CLU and Chartered Financial Consultants. He is married and has two sons, both graduates from Texas universities.



Richard N. Palmquist, EDUC, is Diocesan Minister of Music at the First United Methodist Church in Graham, Texas.

James W. Pinholster, ARHU, M.B.A. '60, was elected the District 10 director of the Independent Insurance Agents of Virginia for the 1990-91 fiscal year. A 28-year insurance industry veteran, Pinholster is currently vice president of Ferraro and Pinholster in Fairfax, Va. He is past president of the Independent Insurance Agents of Northern Virginia.

Gladys Joey Potter, EDUC, works at The Metropolitan Washington Ear Inc. in Washington, D.C., a radio reading station for the blind and physically challenged.

'60

Joseph R. Holland was elected in 1990 as New York state senator for the 38th Senate district. Prior to holding this position, he served as an assemblyman in the New York State Legislature.

'61

Philip C. Geraci, JOUR, a College Park professor for 23 years, retired in 1987. He now runs Photo Design, a fine-art photography publishing business.

Glen S. Tarbox, ENGR, has joined Bechtel Corp. as vice president and manager of Bechtel's water resource business line. With 29 years of experience in water resource development projects, Tarbox has authored more than 25 technical articles, papers and books on the subject. He is a fellow of the American Society of Civil Engineers and is a registered professional engineer in 10 states. Tarbox was recently elected to the Board of Directors of the U.S. Committee on Large Dams.

Lloyd O. Whitehead, ARHU, was appointed to the Wicomico County District Court by Maryland Gov. William Donald Schaefer for a ten-year term. Prior to his appointment, Whitehead maintained his own law firm in Salisbury, Md., and served in the Army National Guard from 1964 to 1970.

'62

William A. Fry, EDUC, GRAD '63, Ph.D. '76, recently received the Faculty Senate Organization Award for Full-Time Faculty at Prince George's Community College. He also received recognition as an outstanding teacher from the Maryland State Board for Community Colleges. He has been at PGCC for 21 years.

Elaine Northrup is one of the top realty agents in Howard County with more than \$17.5 million in settled sales in 1990. After graduating from College Park with honors, Northrup worked as a high school English teacher for two years before deciding to become a homemaker with the birth of her son and daughter. Northrup entered real estate in 1973, eventually becoming the top producer for the Coldwell Banker office where she works.

'63

Louis Redd, EDUC, became full-time pastor of the Catonsville Baptist Church in Arbutus, Md., in April 1990. He is also involved in a prison ministry. Redd taught for 23 years at Lansdowne High School in Maryland before becoming an ordained Southern Baptist minister in 1980.

'64

James A. Calderwood, BMGT, has become counsel to the law firm of Zuckert, Scoutt and Rosenberger in Washington, D.C. Formerly he served as senior trial attorney, antitrust division, for the U.S. Department of Justice.

Larry L. Howard, AGRI, is deputy area director of administrative operations—Northeast region for the U.S. Department of Agriculture Agricultural Stabilization and Conservation Service.

Mark Sakitt, Ph.D., CMPS, has been named assistant director of planning and policy at Brookhaven National Laboratory in Upton, N.Y. Sakitt has worked in BNL's Physics Department since 1964, doing research in particle and high-energy physics. He was appointed senior physicist in 1982. He lives in Stony Brook, N.Y.

'65

Roger E. Flax, ARHU, is in his 21st year of owning and operating Motivational Systems, a corporate management and sales consulting firm. Motivational Systems is based in West Orange, N.J.

John B. Kincaid, BMGT, recently merged his Greenbelt public accounting firm, Kincaid Coakley & Co., with Stegman & Co., another area firm. He will serve with Stegman as co-director of the new company. Kincaid had his own practice from 1973 to 1978, before forming Kincaid Coakley. Kincaid is a board member of The Entrepreneurship Institute of Washington, D.C.

Rose Marie Becker Lanier, EDUC, GRAD '82, is a sales representative for manufacturers of telecommunications equipment. She also volunteers for the St. Vincent de Paul Society, which operates a food pantry, and the New Hampshire Central American Network, which aids people in Central America whose human rights are violated.

James C. McGroddy, Ph.D., has been named a vice president for IBM. He also serves as head of the Research Division, where he has been director since 1989. He joined IBM in 1965 and has held

many positions within the company. McGroddy is a fellow of the American Physical Society and of the Institute of Electrical and Electronic Engineers.

'66

Harry T. de Moll, EDUC, has been appointed to the Frederick County Board of Education for a five-year term

by Gov. Schaefer. He also holds a law degree from the University of Maryland ('74), and is a principal in the law firm of Doherty, Elliot, Nicklas & de Moll in Frederick, Md.

Curtis C. Huff, EDUC, has been named Certified Plant Engineer of Shockey Companies, Winchester, Va. Huff was formally maintenance manager of that corporation.

Dan Goodman: From EE to CEO

Dan Goodman has been a "pinball wizard" since the age of 10, when he started his first pinball company called "Pinball Renovations." He fixed broken pinball machines.

What started out as a hobby for the 1987 graduate with a B.S. in electrical engineering has developed into a business. Goodman modified a pinball machine called the Gottlieb for people with handicaps ranging from cerebral palsy to multiple sclerosis.

The machine, designed lower to the ground to accommodate wheelchairs, is called ArcadeAccess. It is operated by remote control from various parts of the body, which could be a single muscle movement, an eyelash movement or even a breath.

The newspaper *Washington Technology* has called ArcadeAccess one of 1990's "best new products." The pinball machine serves as a therapeutic device for the handicapped by helping people with their self-esteem, problem solving, sensory discrimination, reaction time and coordination.

Goodman, who supplied non-modified pinball machines to the National Institutes of Health for 12 years, got the idea from a friend whose son became a quadriplegic in a skiing accident. The friend wanted Goodman to design a pinball machine for his son because it was his son's favorite recreational activity before the accident.

Goodman complied while still an engineering student at Maryland, and three years later he is working on selling his products to hospitals around the country.

Goodman has also come back to his alma mater through a grant supplied by the Maryland Industrial Partnership (MIPS) in the Engineering Research Center located on campus. Goodman says the program is set up "to generate more new products and commercialized products and services in Maryland."

The CEO of The Silverthorn Group Inc. admits to being very busy with his new product, but he adds, "I'm real busy but not as busy as I was in engineering school."

—Toni Guagenti



William Pease, ARHU, is an author and former U.S. attorney. His most recent book is *Playing the Dozens*, a Washington-based detective novel. Pease lives and works in Washington, D.C.

Richard A. Rice, ENGR, has been promoted to chief of public works for McCrone Inc., an Annapolis-based engineering firm. Rice has more than 24 years of engineering experience and is active in the Engineering Chapter of the College Park Alumni Association.

'67

Julius W. Becton Jr., GRAD, is president of his alma mater, Prairie View A & M University in Prairie View, Texas. A retired Army lieutenant general, Becton was recently elected to the board of directors of the Marine Spill Response Corp., a non-profit organization established to provide emergency assistance for oil spills occurring in U.S. coastal waters. He has also served as director of the Federal Emergency Management Agency and director of the Office of U.S. Foreign Disaster Assistance of the Agency for International Development. During his Army career, Becton served as deputy commanding general of the Army's training and doctrine command, as well as the commanding general of the VII U.S. Corps in Germany and the 1st Cavalry Division.

Gene Castroville, PERH, recently resigned as director of athletics at Alfred University in New York, a position he held for 13 years, and moved to Somerset, Pa., where he purchased a health and fitness center. Castroville began his association with Alfred in 1969, serving as the university's first full-time athletic trainer. While in that position, he was head athletic trainer for the U.S. men's junior national basketball team that played in Brazil in 1979. He was a staff trainer at the 1980 Olympic Games in Lake Placid, N.Y., and at the 1979 U.S. Sports Festival in Colorado Springs, Colo. Castroville has served as president of both the New York State and Eastern Athletic Trainers Associations. For the past two years he served as president of the Independent College Athletic Conference. He has also been on the Eastern College Athletic Conference Committee on Infractions, as well as the ECAC Football Committee.

'68

Michael J. Rawl, ARHU, is vice president of public affairs at Intelligent Electronics, the nation's largest network of computer dealers. He lives with his family in Glenmoore, Pa.

'69

Louis J. Baccei, Ph.D., CMPS, is senior vice president of Loctite Corp. in Hartford, Conn. Baccei earned Loctite's Vernon K. Kriebel Award for developing a series of structural adhesives. Baccei is a member of the American Chemical Society. He lives with his wife and four children in Farmington, Conn.

Dr. Charles W. Miller, ARHU, finished his Ph.D. in history at Arizona's Union Institute in 1990. His dissertation will be published in 1991 and is titled *Stake Your Claim! The Tale of America's Enduring Mining Laws*. Miller is working in Salt Lake City as an official historian for the U.S. Department of the Interior, where he served previously as a geologist.

Stephen J. Niven, ARHU, has been named vice president of human resources for Mid-Atlantic Toyota and Frederick Weisman Co. Niven joined MAT in December 1985 as manager of human relations and was later made director of that department.

Richard Ottaviano, M.B.A., was recently appointed vice president of human resources for AST Research Inc., Irvine, Calif. Ottaviano has more than 20 years experience in human resources and served as vice president of human resources at Cipher Data Products in San Diego prior to joining AST.

'70

Patsy A. Oakes is in her fifth year as principal of W.J. Quarles Elementary School in Long Beach, Miss. Before becoming principal, she taught elementary school for 11 years.

'71

Ralph E. Stokes recently joined Commonwealth Land Title Insurance Company as vice president and Rhode Island state manager. After graduating from College Park, Stokes attended the New England School of Law in Boston. A member of the Rhode Island Bar Association's Title Standards Committee, the Massachusetts Bar Association and the board of directors of the Rhode Island Conveyancers Association, Stokes worked as assistant vice president, Rhode Island branch manager and state counsel for another title insurer before joining Commonwealth.

Rev. Dr. Walter Scott Thomas, BMGT, is pastor of the New Psalmist Baptist Church in Baltimore. After considering a career in economics, he decided to attend the Howard University School

of Divinity. Thomas now preaches to nearly 6,000 people daily and helped the New Psalmist congregation establish a Christian school. He lives with his wife and four children in Baltimore.

Robert Alan Thornton, EDUC, recently ran for the House of Delegates in Maryland. Thornton was a revenue officer with the Internal Revenue Service before attending law school. He is past

president and vice president of the Caroline County Board of Education, and lives in Denton, Md., with his wife and two daughters.

'72

Edward J. Bassett, BMGT, is vice president of DuPont Pension Fund Investment. Bassett graduated *magna cum laude* from College Park. He joined Du-

Mary Downing Hahn: Writing for Children

Mary Downing Hahn, '60 (Art with a minor in English) and M.A. '69 (English), is doing what she's always wanted to do; she's writing novels for children and adolescents. She's completed 10 so far.

Her newest novel, *The Dead Man in Indian Creek*, was inspired by an event from her childhood growing up in College Park.

As in the book, the incident in Hahn's childhood involved two boys who found a dead body in the woods bordering College Park. But in her book, Mrs. Hahn adds suspense and drama in this fictional tale of two boys searching for the person responsible for the death of the person they found.

Hahn's novels are recognized all over the country for what have been called her "well-defined characterizations and interesting plot lines."

Her 1989 novel *December Stillness* was the winner of the 1989 Child Study Association Book Award and the 1989 Jane Addams Peace Association Children's Book Award.

Her 1988 novel *Wait Till Helen Comes*, a ghost story, was the recipient of the 1988 Dorothy Canfield Fisher Award, the 1988 Utah Children's Book Award and the 1989 Colorado Children's Book Award.

Hahn travels around the country giving speeches to students who have read her books. "You get a lot of positive feedback writing for kids," she says, speaking of the large number of letters she receives from children.

Hahn lives in Columbia, Md., with her husband. She is the associate librarian in children's services at the Laurel Public Library in Laurel, Md.

Her two daughters are now studying art, one in Philadelphia, the other in Chicago. Observation of her daughters when they were growing up inspired some of her novels. "They've been my biggest fans," Hahn says.

—Toni Guagenti



Pont in 1977 as an equity analyst. He lives in Chadds Ford, Pa., with his wife and two children.

John J. Gretz, EDUC, GRAD '79, is a higher education account executive with Commodore Business Machines, promoting educational uses of video in Southern California, Arizona and New Mexico.

Jean M. Jones, B.S., GRAD '83, has been named a partner in the Baltimore-Washington law firm of Frank, Bernstein, Conaway & Goldman. A specialist in civil litigation and medical malpractice defense, Jones is also a nurse. She received her master's degree in cardiovascular nursing from the Catholic University of America in 1979. Jones has been a member of the Maryland Bar since 1983 and is a member of the Montgomery County, Baltimore City, and American Bar Associations, as well as the American Association of Nurse Attorneys.

Brenda Peters has worked for almost 10 years with the Maryland Cystic Fibrosis Foundation, chairing events and serving on its board of directors. Diagnosed with cystic fibrosis when she was 21, Peters received her master's in communicative disorders from Johns Hopkins University in 1978. She worked as a teacher until her illness worsened in 1987. Peters has not allowed her condition to limit her activities, however. She recently became a certified scuba diver, worked for the U.S. Census, the Democratic Party, and the Sierra Club, and completed a 10K run. She lives with her husband in Eldersburg, Md.



D.J. Foster, ARHU, is co-founder and director of Feet First Jazz and Tap Dance Studio in Bethesda, Md. Feet First is the only dance studio in the Washington area devoted exclusively to jazz and tap dance instruction. Foster performed with area dance companies before opening Feet First in 1977.

Randall Gill, EDUC, received a Master of Divinity degree from Princeton Theological Seminary in 1977 and is presently pastor of the First Presbyterian Church of Boynton Beach, Fla.

Margaret Lee Norton has become counsel to Shapiro and Olander. After graduating Phi Beta Kappa and *summa cum laude* from UMCP, Norton attended the University of Maryland School of Law where she served as notes and comments editor of the Maryland Law Review. Norton was in private practice in Baltimore for seven years prior to entering public service as

assistant to the chancellor of the University of Maryland System. In 1985, she was appointed assistant attorney general and principal counsel to the Maryland Department of Budget and Fiscal Planning and counsel to the state treasurer and to the Board of Public Works; in 1988 she was promoted to principal counsel. Norton, a member of the Bars of Maryland and the District of Columbia, is also an adjunct professor at the University of Maryland School of Law.

Kathy Jean Watson, EDUC, has been a teacher for more than 17 years at Rising Sun High School in Rising Sun, Md.



Ellen Cunningham, Ph.D., has been promoted to full professor and chairperson of the science and mathematics department at Saint Mary-of-the-Woods College in Saint Mary-of-the-Woods, Ind.

Gary Eddey, EDUC, received his M.D. from Cornell University Medical College. He is the General Academic Pediatrics Director of the Ambulatory Pediatric Care Program and director of School Health Program at Morristown Memorial Hospital, N.J.

Christine A. Edwards, ARHU, has been named executive vice president and director for Dean Witter Financial Services Group. She holds a law degree from the University of Maryland and lives in Lake Forest, Ill., with her husband and two children.

Martha Farkas, EDUC, has been a senior aviation cartographer for National Ocean Survey and is working toward recertification to resume teaching elementary school.

Bradley W. Livengood, BMGT, has become a partner in the professional services firm of Ernst & Young. Livengood has been with Ernst & Young for 12 years, and is a certified public accountant. He lives in Chicago.

Chris Paulis, EDUC, GRAD '82, is secondary supervisor of language arts for Howard County Schools in Maryland.

Ronald Robeson, EDUC, received the National Council for Social Studies Outstanding Service Award in 1990. He is chairperson of the Social Studies Department at Bowie High School.



Lt. Cmdr. Daniel V. Munger, ARHU, recently reported for duty aboard the aircraft carrier USS Midway, stationed in Yokosuka, Japan. Munger joined the Navy in February 1970.

C. Richard Barb, LFSC, has been named an "Early Career Research Scientist of the Year" for the South Atlantic area of the Federal Agricultural Research Service. Barb has conducted extensive biological research in the field of animal science. He is a member of the American Society of Animal Science and the Society for the Study of Reproduction.



Donald Batchelor, Ph.D., GRAD '72, a theoretical physicist at the Oak Ridge National Laboratory's Fusion Energy Division in Oak Ridge, Tenn., has been named a fellow of the American Physical Society for significant contributions to physics. Batchelor joined ORNL in 1976 and, since 1984, has led a group studying the effects of electromagnetic waves on plasmas. He is a member of the Oak Ridge Symphony Orchestra, Oak Ridge Community Band and the rhythm and blues band Boys' Night Out. Batchelor lives with his wife, daughter and son in Oak Ridge.

Larry Dillon, EDUC, is executive director of Youth for Christ/Campus Life, an organization that teaches Christianity to high school students in Maryland and Pennsylvania. He traveled to Hungary and Czechoslovakia last year to teach people there how to work with youth in the community and the church.

Constance McCreery Donock, EDUC, is a manager for Citicorp, overseeing its largest computer-based training unit. She lives in Apollo Beach, Fla.

Ralph Fisher, BMGT, has been named operations manager for the North Central Region of Mercedes-Benz of North America, which he joined in 1978. He is married and has two children.

Dr. Robert H. Gotkin, LFSC, has a private practice in plastic and reconstructive surgery in Hicksville, N.Y. Gotkin is certified by the American Board of Plastic Surgery. He lives with his wife, who is also a physician, in Woodbury, N.Y.



Elena Colicelli, Ph.D., CMPS, is professor and chair of the Department of Chemistry at the College of St. Eliza-

beth in Convent Station, N.J. Colicelli has been awarded a Fulbright Senior Lecturer Award and will be a visiting professor of chemistry at the University of Zimbabwe's Bachelors of Technology Program in Balawayo, Zimbabwe, for the 1990-91 academic year.

J. Jeffrey Griffith, Ph.D., has joined the Carroll Community College faculty as an assistant professor of English for the Spring 1991 semester, bringing with him more than 20 years of teaching experience. Griffith has a long record of public service in Carroll County, and served two terms as county commissioner. He has chaired campaigns for the United Way of Central Maryland and the Carroll County Youth Drug Summit. Griffith is on the board of directors of the Big Brothers and Big Sisters of Central Maryland, and he is a founding member of the Carroll County Human Services Council, the Carroll County Sexual Abuse Treatment Center and the Carroll County Drug Abuse and Alcohol Prevention Work Group.

Donna Marshall Burnsky, BSOS, is a full-time mother of two boys and a homemaker. She decided to postpone her career as an Arbitration Specialist for State Farm Insurance Co. She is currently editor of the Belmont Elementary School P. T. A. newsletter. She and her husband reside in Olney, Md.

Charles Post, JOUR, has been named circulation director of Kalmbach Publishing Co. in Brookfield, Wis. Post has been active in publication management for a number of magazines, including *Compute!*, *Fortune* and *People*. He lives in Brookfield with his wife and two sons.

John Pratt, BSOS, has been named regional manager for Bell Atlantic's Pittsburgh Cellular Operations. Pratt joined Bell Atlantic in 1985 as a sales representative and became sales manager in 1987. He lives with his family in the North Hills section of Pittsburgh.

Robin Anne Asaki Schlossman, EDUC, has taught preschool, kindergarten and first grade, and worked as a research assistant at the Yale Child Study Center Project. She currently volunteers for the Committee on Gifted Children and cares for her two children. She lives in Phoenix.

Marc J. Schoem, HUEC, has been promoted to director of the Division of Corrective Actions at the U.S. Consumer Product Safety Commission, where he had been assistant director since 1987. He directs investigations

and orders recalls or other remedial actions to prevent injuries from unsafe consumer products.



Karen L. Colteryahn, BMGT, a client service manager at Development Dimensions International in Pittsburgh, was recently named certified customer service executive by the International Customer Service Association. Colteryahn graduated *magna cum laude* from College Park. She lives in Lawrence, Pa.

Jerry S. Dunietz, BSOS, has joined the law office of Edward J. Carnot in Rockville, Md. He will specialize in bankruptcy and commercial litigation.

Robert C. Hill, BMGT, is vice president of First Wachovia Operational Services in Atlanta. Hill is responsible for check processing for the First National Bank of Atlanta. He began his banking career in Virginia in 1978, and joined First Wachovia in 1985 as assistant vice president and manager of electronic banking operations. He became manager of retail service operations in 1987, and vice president in 1989.

Vashti McKenzie, UGS, recently became the first woman pastor of Payne Memorial African Methodist Episcopal Church in northwest Baltimore. Prior to receiving her master of divinity degree from Howard University in 1985, McKenzie worked as a model and then became a radio broadcaster for several Christian stations. McKenzie pastored two small churches in rural Maryland and one in Baltimore before her appointment to Payne. One of only 500 women out of the more than 19,000 registered A.M.E. ministers, McKenzie is now preaching in the same neighborhood where she grew up. She is married to a former NBA player, Stanley McKenzie, and has three children.

Stacey R. Silverman, ARHU, works at the College Park law firm of Goldstein & Baron, where she practices tax law.

Navy Lt. Cmdr. Patrick G. Startt recently reported for duty aboard the aircraft carrier USS Independence, which is currently deployed to the Middle East in support of Operation Desert Storm. Startt joined the Navy in February 1979. He received an M.B.A. from George Washington University in 1990.



Steven J. Kozioł, BSOS, has been promoted to district sales manager for Stuart Pharmaceuticals, a business unit of

ICI Pharmaceuticals in Wilmington, Del. He began his career with ICI in 1985.

Richard Taubald, EDUC, is associate director of the Center for Continuing Education and administrator of the Gifted and Talented Education Program at Montclair State College in New Jersey.



Neil F. Brierley, CMPS, recently ran his own campaign for a position on the Howard County, Md., school board. He used his knowledge of engineering and emphasized the design of school buildings as a major factor in the quality of education. Brierley holds a master's degree from Johns Hopkins University.

Capt. John P. Diffley, ARHU, recently participated in Operation "Sharp Edge" while serving with the 26th Marine Expeditionary Unit from Camp Lejeune, N.C. "Sharp Edge" was organized to protect American citizens and foreign nationals at the U.S. Embassy in Monrovia, Liberia. Diffley joined the Marine Corps in 1980.

Linda E. Moosher is a home economist for Hatboro-Horsham School District in Pennsylvania, and is working toward her master's degree in early childhood education at Chestnut Hill College in Philadelphia.

Lt. Cmdr. Keith S. Pumroy, LFSC, is a Navy radiologist serving in eastern Saudi Arabia with Navy Fleet Hospital Five, the largest Navy hospital currently operating. A 1984 graduate of the University of Maryland School of Medicine, Pumroy is in Saudi Arabia as a part of Operation Desert Storm.

Bruce Supovitz, ARHU, has been named local sales manager for WCXR/WCPT, Washington, D.C.'s combination classic rock and CNN radio station. Prior to this appointment, he spent the last eight years as retail sales manager and account executive for WGAY/WWRC in Washington. He has also held positions with J. Walter Thompson and Goldberg-Marchesano.

Patricia Tobin, EDUC, is an account executive at Don Richard Associates in Baltimore. She lives in Bel Air, Md.

Tina J. Palso Wray, EDUC, is a certified childbirth educator, part-time employee for the Rhode Island Group Health Association and owner of Stork Birth Announcements Inc., a company that prepares expectant couples for childbirth. She has three children of her own.



Dr. Michael Berenhau, LFSC, operates his own optometry practice in Bethesda, Md. He is a Phi Beta Kappa graduate of College Park.

Dinshaw M. Burjorjee, Ph.D., ARHU, has been awarded a Fulbright grant to travel in India for the 1990-91 academic year. Burjorjee is a professor emeritus of English at Montgomery College in Rockville, Md. He has taught at and attended a number of area universities, including American University, Catholic University and Georgetown.

Valera Clarke Lynch, EDUC, is vice president and vice chairperson of the Board of Directors for the Ethos Foundation, a non-profit Virginia group against substance abuse.

Peter A. Mnatzakanian, M.A., is a pulmonary sales specialist for Quinton Instrument Co. in North Potomac, Md. He is married and has two boys.

Catherine M. Shaw, BMGT, has served as president of the American Marketing Association, Washington chapter, for the past year. As president, Shaw revitalized the chapter financially (from a deficit of \$700 to reserves of \$20,000 in one year), and has recruited top quality speakers for AMA meetings. Shaw joined AMA in 1977 as a student at College Park, and has served on the executive board of the professional chapter since 1982. Shaw currently works at the Pentagon Federal Credit Union as a marketing research analyst.

Allen J. Wainger, GRAD, was recently promoted to division manager for the Geographic Information System/Mapping Division at Greenehorne & O'Mara Inc., a multidisciplinary consulting design firm in Greenbelt, Md. Wainger, a registered professional engineer, was previously the department head for the corporation's Computer Aided Design and Drafting (CADD) system. He has been with G&O for 13 years. Wainger lives with his family in Columbia, Md.



Tilahun Beyene, EDUC, is associate director of academic development at UMCP's Office of Intensive Educational Development.

Gene D. Bruce, EDUC, is director of the Army's Continuing Education System, which provides educational services for soldiers and family members on military installations worldwide. He lives in Alexandria, Va.

Ron Fitzmartin, EDUC, is director of biostatistics and clinical data management for the Purdue Frederick Pharmaceutical Co. He lives in Woodbridge, Conn.

Laura Jerome, EDUC, is an eighth-grade earth science and reading teacher at Riverview Middle School. Jerome is in her fifth year of teaching in the Caroline County School System. A member of the National Science Teachers Association, she attended the governor's Academy for Math, Science and Technology last summer.

Bill Slezak, EDUC, taught at Laurel Senior High before joining Digital Equipment Corp., a computer firm in Landover, Md.



Benita Keller, GRAD, is a freelance photographer, instructor at Shepherd College in Shepherdstown, W.Va., and photography editor of *Antietam Review*. Keller had a photo exhibition at Frederick Community College's Fine Arts center in June 1990 titled "Spirit Unbroken: The Village People," which featured photos taken during a mission trip to Nigeria in 1989.

Lt. David K. Richter, B.S., recently returned from deployment aboard the USS Abraham Lincoln, the nation's newest aircraft carrier. He served with Fighter Squadron-114 on the carrier's maiden voyage around South America. Richter joined the Navy in 1985.

Gary Schwartz, UGS, took over as director of the Emmitsburg Community Chorus in 1990, which sang some of his original compositions during its 26th season. He was the assistant musical director at Montgomery College in 1985 and a member of the Paul Hill Chorale of Washington, D.C., in 1978-79. He is also a real estate agent and piano teacher.

Dr. Robert Whaples, BSOS, has been awarded the Allen Nevins Prize for the "outstanding dissertation in American economic history" by the Economic History Association. He completed his Ph.D. at the University of Pennsylvania in May 1990.



Lt. Marcella J. Auclair, ARHU, recently received the Navy Achievement Medal for superior performance of duty while serving at the Naval Legal Service Office in San Diego. Auclair graduated from Washington College of Law, Washington, D.C., with a Doctor of

Jurisprudence degree. She joined the Navy in 1988 and is currently stationed at the Bureau of Medicine and Surgery, Washington, D.C.

Michelle Barnes, BSOS, has opened her own private law practice. She is married and lives in Cambridge, Md.

Robert A. Paczynski, CMPS, received an M.S. degree from College Park in 1990 in computer systems management. He is currently employed as a senior consultant for the computer systems security practice of Booz, Allen & Hamilton in Bethesda, Md.

Keith R. Pauley, BMGT, is vice president and portfolio manager for real estate securities at Alex Brown Kleinwort Benson Realty Advisors. Pauley joined the company in 1986 as a financial analyst. He became portfolio manager for real estate securities in 1987. Pauley is also a member of the National Association of Real Estate Investment Trusts and the National Council of Real Estate Investment Fiduciaries.

'85

Laura Claridge, Ph.D., is an author and associate professor at the Naval Academy, Annapolis, Md. She recently co-edited a collection of essays titled *Out of Bounds: Male Writers and Gendered Criticism*, and is author of the forthcoming *Romantic Potency: The Paradox of Desire in Wordsworth, Shelley, and Byron*.

Michael R. Goudreau, ENGR, has joined McCrone Inc., an Annapolis-based engineering firm, as a civil site engineer.

Amie F. Hamlin, EDUC, is a software consultant at AGS Information and teaches vegetarian nutrition at Wake Tech Community College. Hamlin resides in Raleigh, N.C.

Capt. Michael W. Kennedy, ENGR, of the United States Air Force, is an instructor pilot with the 71st Tactical Fighter Squadron at Langley Air Force Base, Va. He recently participated in a joint U.S.-Canadian-British flying force in Alberta, Canada.

Rita L. Robinson, EDUC, was a recipient of the 1990 Outstanding Education Award, co-sponsored by the Prince George's Chamber of Commerce and the Superintendent's Advisory Council for Business and Industry.

Jose M. Torres, EDUC, founded Individual Associates Multinational Inc., and has trained more than 1,200 educators in positive youth development as a

means of drug prevention for students. Torres was selected as one of 1989's Outstanding Young Men of America.

James H. Van Sciver, EDUC, is superintendent of Lake Forest School District in Harrington, Del., and an adjunct professor at Wilmington College.

'86

Christopher N. Kiessling, an airman with the Air National Guard, completed training at Lackland Air Force Base, Texas.

Trevor Seneff, ARHU, is videographics manager at Soundwave Inc., an audio post-production firm in Washington, D.C. She interned with the "Arch Campbell Show" at WRC-TV in Washington, D.C., before joining Soundwave as office manager in 1988.

Dana G. Sippel, BMGT, has joined Burt Associates Inc., a financial planning and management firm in Bethesda, Md. A CPA and CFP, Sippel will be an associate financial planner.

'87

Fernando Barriga, BMGT, has been promoted to assistant manager of the Silver Triangle branch of Citibank in Washington, D.C. A native of Ecuador, Barriga is working toward a master's degree in international business at College Park and lives in Bethesda, Md.

Lt. j.g. Thomas A. Mercer, M.S., recently reported for duty with Helicopter Anti-Submarine Squadron Light-45, Naval Air Station North Island in San Diego. He completed his undergraduate studies at the U.S. Naval Academy in Annapolis, Md.

Luis Santiago, ARCH, has joined Gilday Design/Remodeling Inc. in Silver Spring, Md., as an architect. He has more than five years experience in architectural design and construction. Most recently, Santiago worked for ADE Associates, a Bethesda, Md., architectural firm. He has also worked with the National Park Service and Shalom Barnes Associates, Washington, D.C. Santiago is a member of the American Institute of Architects.

'88

Elyse Adler, JOUR, has been named marketing manager of the St. Louis Arena. Adler was previously marketing assistant at the Spectrum in Philadelphia.

Robert G. Anderson was commissioned a second lieutenant upon graduation from the Air National Guard Academy of Military Science in Knoxville, Tenn., and is assigned to Eastern West Virginia Regional Airport in Martinsburg, W.Va.

Lt. Neal J. Armstrong, GRAD, BMGT, recently reported for duty at 17th Coast Guard District in Juneau, Alaska. Armstrong joined the Coast Guard in 1979.

Trish Hogan, ARHU, has joined Mintz & Hoke Advertising and Public Relations as an agency proofreader and traffic assistant. Prior to working at Mintz & Hoke, Hogan was a marketing assistant at Conning & Company in Hartford, Conn., and a White House correspondent in Washington, D.C. She lives in West Hartford, Conn.

'89

Martin E. Karmann has been commissioned the rank of ensign in the U.S. Navy upon his graduation from the 16-week Officer Candidate School (OCS). Karmann joined the Navy in April 1990.

Sharon Groninger MacDougall, EDUC, is the Transition Support Teacher for Montgomery County Public Schools and works with the hearing-impaired.

Barbara J. Stein, BSOS, is working as a survey statistician for the National Center for Health Statistics in Hyattsville, Md.

Laura Thomas, PUA, worked for a year in the public finance department of the Fuji Bank, and then transferred to the Mitsubishi Bank Ltd.

Sarah Zollman, JOUR, is a public affairs assistant at the Society of American Foresters in Bethesda, Md.

'90

Christine K. Berts, BMGT, works for Peterson Consulting in Washington, D.C., and is studying for the certified public accounting exam. She lives in Charlotte Hall, Md.

Kent J. Blumenthal, Ph.D., is director of the National Recreation and Park Association Information System Division and a certified leisure professional. Blumenthal also serves as executive secretary for the National Society for Park Resources and is immediate past president of the Recreation Chapter of the UMCP Alumni Association. He has authored several published articles and lectures frequently on park and recreation topics. Blumenthal was awarded the NRPA Service Award in 1988, an

NSPR "Award of Appreciation" in 1984, and the National Fitness Coalition's "Resolution of Commendation" in 1984. He and his wife live in Washington, D.C., and were expecting their first child in February.

Francis R. Gublo, AGRI, has joined Southern States Cooperative Inc. in Charlotte Hall, Md., as a management trainee for a Southern States garden facility. An Army veteran and former police officer, Gublo lives in Upper Marlboro with his wife and son.

Lori Ann Hiser, UGS, is working as an activities assistant and counselor at an area retirement community. She is engaged to be married.

Sara Reynolds, BSOS, is attending the University of Maryland, Baltimore Campus, School of Law. Reynolds graduated Phi Beta Kappa with honors from the Department of Psychology. She was also a Dean's Scholar and a Maryland Distinguished Scholar.

Class Notes provides news from alumni about job promotions, marriages, births and other appropriate personal information. Because of the popularity of this section, the next issue of *College Park*, and each one thereafter, will publish news only about Alumni Association members.





PHOTO: JOHN T. CONSOLI

Tools of Another Time

In the lobby of the second floor of the J.M. Patterson Building, you'll find a display of implements whose names accurately suggest another era: a cooper's ax and gauges, a marlinspike, a spoke shaver, and many more.

The antique tools are part of a collection of 17th and 18th century implements donated to the university by the wife and son of the late Herbert T. Shannon of Hermansville, Md., on the Eastern Shore.

Shannon was the co-founder of Shannon & Luchs Co., a prominent Washington, D.C., real estate firm. He died in 1946, and had collected more than 5,000 tools used in early American industry.

Donald Maley, professor emeritus of industrial education, says the tools offer a window on early American ingenuity. "They allow us to appreciate the skill and the capabilities of the people who created Monticello and other beautiful structures of that period," he says.

With college graduation in the past, financial planning should be in your future.

University of Maryland...
your alma mater.

Although you'll remember your college days forever, they are a time of the past. What's *here and now* is planning for your future...selecting financial vehicles to help you achieve the goals you've set for yourself. Whether it's securing a good life insurance plan...building a fund for your children's college education or putting away money for your own retirement...there's a plan that can work for you.

Introducing Premier High Limit Term, Life Plus and Flex-Advantage. Three exceptional plans designed with you, your lifestyle and your goals in mind.

Premier High Limit Term offers you up to \$1,000,000 of pure term insurance. It matches your changing needs and helps protect all you've worked for in life with solid insurance coverage.

Life Plus is a whole life insurance plan that helps you accumulate spendable wealth for your future through tax-deferred savings

earning a competitive interest rate. With loan options available it becomes an excellent vehicle for saving money for college tuition.

Flex-Advantage, an annuity, serves as a popular tax-deferred retirement plan to the money-wise individual. With an extraordinary first year interest rate, a competitive interest rate after year one and flexible monthly contributions, it's designed to fit anyone's personal financial portfolio.

For free information

With more information about these plans at your fingertips, don't wait! You are under no obligation. Complete the coupon below, detach and mail to Continental American Life, 300 Continental Drive, P. O. Box 15750, Wilmington, DE 19850-5750. You'll receive a full description of the plan(s) you select.

If you have any questions call:
(301) 583-2595
CMI Insurance Specialists; or
1-800-451-8333, ext. 54
Continental American
Service Specialists.

The company behind the plans.

Continental American Life has been protecting individuals like you for over 80 years. We have consistently received the highest recommendation every year from the A. M. Best Company, Inc., the world's recognized leading independent insurance rating service. This attests to Continental American's financial soundness and ability to meet obligations to policyowners.

All products are not available in all states.

Yes, I want free information on the plan(s) that can help me meet my financial goals. Check the plan you want. ☐ Premier High Limit Term ☐ Life plus ☐ Flex-Advantage

Name

Address

Phone # (Home) (Business)

Date of Birth

Sex ☐ Male ☐ Female ☐ Smoker ☐ Non-smoker



300 Continental Drive
P. O. Box 15750
Wilmington, DE 19850-5750

An Investment In UMCP Brings Benefits For A Lifetime!



BENEFITS TO YOU FROM A TRUST ARRANGEMENT:

- Income for life.
- Sizeable income tax charitable deduction.
- Increased income from a low-yield asset.
- Avoidance of capital gains tax on appreciated assets used to fund trust plan.
- Satisfaction of supporting the University of Maryland at College Park.

FOR FURTHER INFORMATION:

Write or call Leo Geier
Director of Planned Giving
3300 Metzger Road
Adelphi, Maryland 20783
(301) 853-3678 or call toll free:
1-800-289-8020

*"Over the years, I have
tended to see myself as a
company man, and at College
Park I very much like the
company I keep. That is the
reason why my wife and I
have made a gift to the
university. Are there gifts to
come from others?
We hope so!"*



SAM SCHOENBAUM

*P*rofessor Sam Schoenbaum has invested his life in scholarship and teaching, and his academic gifts flow through his writings and the minds of his students. UMCP knows him best as a distinguished professor of Renaissance literature and Director of the Center for Renaissance and Baroque Studies. Throughout the world he is also known as a leading authority on William Shakespeare. He spent years working on the playwrights of the period before he decided to make Shakespeare "his life." The list of this professor's achievements parallels the list of honors bestowed on him and recorded in Who's Who. Perhaps the best gift of all has been his own life lived with dedication and honor.

UNIVERSITY OF MARYLAND
Office of Alumni Programs
Rossborough Inn
College Park, Maryland 20742

NON-PROFIT ORG.
U.S. POSTAGE
PAID
Permit No. 10
College Park, MD